Form 3160-3 (November 1983) (formerly 9-331C)

PERMIT NO.

APPROVED BY

Pederal Approved of the Action is Necessary will

## UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN TR. ATE.

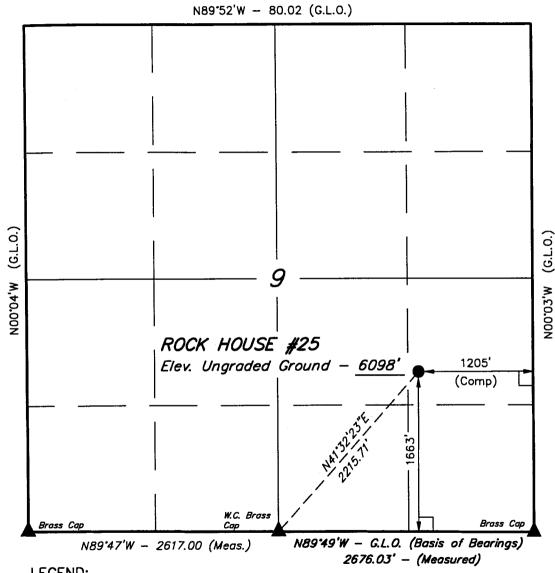
(Other instructions on reverse side)

Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985

| DEPARTMENT OF THE INTERIOR           |  |                     |                        |  | ſ                       | 5. LEASE DESIGNATION      | AND SERIAL NO.                                      |                                |  |
|--------------------------------------|--|---------------------|------------------------|--|-------------------------|---------------------------|---|--------------------------------|--|
| BUREAU OF LAND MANAGEMENT            |  |                     |                        |  |                         | UTU-0780                  |   |                                |  |
| APPLICATI                            | ON FOR PERMIT  | TO DRILL,           | DEEP                   | EN, OR PL                                | .UG B                   | ACK                       | 6. IF INDIAN, ALLOTTEE                              | OR TRIBE NAME                  |  |
|                                      | DRILL XX   | DEEPEN              |                        | PLU                                      | G BAC                   | CK □                      | Rock House U  | nit                            |  |
| b. TYPE OF WELL<br>OIL               | OAS XX OTHER   |                     |                        | INGLE                                    | MULTIP                  | ւս XX ∣                   | 8. FARM OR LEASE NAM                                | (B                             |  |
| 2. NAME OF OPERATOR                  | WELL L. OTHER  |                     |                        | ONE L                                    | ZUNE                    |                           | Rock House U  | nit                            |  |
|                                      | esources, Inc.   |                     |                        |  |                         |                           | 9. WELL NO.<br>#25                                  |                                |  |
| 3. ADDRESS OF OPERAT                 | t Court, Suite 500, Da   | allas Tx.7520       | 1                      | 214-871-5                                | 729                     | -                         | #23   | R WILDCAT                      |  |
| 4. LOCATION OF WELL At surface       | (Report location clearly and   | d in accordance w   | ith any a              | State requirement                        | s.*)                    |                           |   |                                |  |
|                                      | 1663' FSL, 1205' FEL, NE1/4, SE1/4, Sec. 9, T11S, R23E   |                     |                        |  |                         |                           |   |                                |  |
| At proposed prod.                    |  |                     | . •                    |  |                         |                           | SEC. 9, T 11 S,                                     | R 23 E.                        |  |
| 14. DISTANCE IN MIL                  | 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE®  33.2 MILES SOUTH OF BONANZA, UT |                     |                        |  |                         |                           | 12. COUNTY OR PARISH                                | 13. STATE<br>UT                |  |
| 15. DISTANCE FROM PI                 |  | 12/41, 01           | 16. NO                 | O. OF ACRES IN LI                        | EASE                    | 17. NO. OF                | ACRES ASSIGNED                                      |                                |  |
| LOCATION TO NEAD<br>PROPERTY OR LEAD | REST<br>SE LINE, FT.   | 1205'               | 1                      | 1080                                     |                         | TO TH                     | is Well 40  |                                |  |
| 18. DISTANCE FROM I                  | L, DRILLING, COMPLETED,  | 1400'               |                        | оровер рертн<br>5700                     |                         | 20. ROTAR                 | ROTARY  |                                |  |
| OR APPLIED FOR, ON                   | whether DF, RT, GR, etc.)  |                     | <u> </u>               | .,                                       |                         |                           | 22. APPROX. DATE WOR                                | K WILL START*                  |  |
| 21. 2.2.13.10.13 (02011              | 6098'  |                     |                        |  |                         |                           | March 1, 199  | 8                              |  |
| 23.                                  |  | PROPOSED CAS        | ING ANI                | CEMENTING P                              | ROGRAM                  |                           |   |                                |  |
| size of Hole                         | size of casing   | WEIGHT PER I        | FOOT                   | setting dep                              | тн                      |                           | TO SURFACE  | E                              |  |
| 7 7/8                                | 4 1/2  | 11.0                | 5                      | T.D.                                     |                         |                           | CMT TOP TO COVER                                    |                                |  |
|                                      |  |                     |                        |  | <del></del>             |                           | THE OIL SHALE                                       |                                |  |
|                                      | OPER ATO   | l<br>n neoitea      | re nei                 | i<br>Dageetoat                           | וער אני                 | ווי דוו                   | E CUIDIECT WE                                       | T T                            |  |
|                                      |  |                     |                        |  |                         |                           | E SUBJECT WE<br>3 POINT SURFA                       |                                |  |
|                                      | USE PLAN   |                     | IACH                   | ED IU POIN                               | I AIN                   | Dinei                     | 3 FOINT SURIY                                       | ACE                            |  |
|                                      | <del></del>  |                     | חודות                  | NIAI INEOI                               | <b>ጋ</b> እ <i>ለ</i> ል ፐ | ION PI                    | EASE CONTAC   | т.                             |  |
|                                      | IF TOO KE  | EQUIRE AD           | DITIO                  | NAL INFOI                                | ZIVIZI I                | IONIL                     | EASE CONTAC   | 1.                             |  |
|                                      | WILLIAM  | A. RYAN             |                        |  |                         |                           | 760611  | 77777                          |  |
|                                      | 350 S., 800  | E.                  |                        |  |                         |                           | DECEIV  |                                |  |
|                                      | VERNAL,  | UTAH                |                        |  |                         | 11 4                      | //  |                                |  |
|                                      | 801-789-09   | 68                  |                        | 801-823                                  | -6152                   |                           | \\  | 397     ( )                    |  |
|                                      |  |                     |                        |  |                         | וח                        | V. OF OIL, GAS                                      | SIMINING S                     |  |
|                                      |  | •                   |                        |  |                         | <u> </u>                  |   |                                |  |
| zone. If proposal is                 | IBE PROPOSED PROGRAM: If p   | proposal is to deep | pen or pl<br>t data or | lug back, give dat<br>n subsurface locat | ta on pre<br>tions and  | sent produc<br>measured s | tive zone and proposed<br>and true vertical depths. | new productive<br>Give blowout |  |
| preventer program, if                | 11+11-115  | on .                |                        |  |                         |                           |   |                                |  |
| SIGNED                               | WILLIAM A. RYAN  |                     | rl <b>e</b>            | AGENT                                    |                         |                           | _ DATE Dec 1:                                       | 5, 1997                        |  |
| (This space for Fe                   | ederal or State office use)  |                     |                        |  |                         |                           |   |                                |  |

\*See Instructions On Reverse Side

#### T11S, R23E, S.L.B.&M.



#### LEGEND:

\_ = 90° SYMBOL

= PROPOSED WELL HEAD.

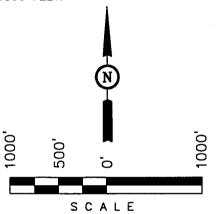
= SECTION CORNERS LOCATED.

#### ROSEWOOD RESOURCES, INC.

Well Location, ROCK HOUSE #25, located as shown in the NE 1/4 SE 1/4 of Section 9, T11S, R23E, S.L.B.&M. Uintah County, Utah.

#### BASIS OF ELEVATION

SPOT ELEVATION LOCATED IN THE NW 1/4 OF SECTION 27, T11S, R23E, S.L.B.&M. TAKEN FROM THE ARCHY BENCH SE, QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6366 FEET.



#### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREFARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE ON THE OR HIS OF HIS OF THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTRATION NO. KAN19

REVISED: 12-9-97 D.COX

# UINTAH ENGINEERING & LANDESTRUCTURE 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

| l          | (100) 100 1011 |      |      |       |                            |                        |  |  |
|------------|----------------|------|------|-------|----------------------------|------------------------|--|--|
| SCALE<br>1 | " = 1          | 000' |      |       | DATE SURVEYED:<br>10-31-97 | DATE DRAWN:<br>11-4-97 |  |  |
| PARTY      |                |      |      |       | REFERENCES                 |                        |  |  |
| J.F.       | J.W.           | B.B. | D.R. | D.COX | G.L.O. PLAT                |                        |  |  |
| WEATH      | R              |      |      |       | FILE                       |                        |  |  |
| l v        | VARM           |      |      |       | ROSEWOOD RESOURCES, INC.   |                        |  |  |

#### Ten Point Plan

Rosewood Resources, Inc.

### Rock House 25 Rock House Unit

Surface Location NE 1/4, SE 1/4, Section 9, T. 11 S., R. 23 E.

#### 1. Surface Formation:

Green River

#### 2. Estimated Formation Tops and Datum:

| Formation           | <u>Depth</u> | <u>Datum</u> |
|---------------------|--------------|--------------|
| Green River         | Surface      | 6,098' G.L.  |
| Oil Shale           | 500          | 5,598        |
| Wasatch             | 3,548        | 2,550        |
| Mesaverde formation | 5,235        | 863          |
| T.D.                | 5,700        | 398          |

#### 3. Producing Formation Depth:

Formation objective include the Wasatch and its submembers.

#### Off Set Well Information:

| Off set well: | Gas Well | Rock House Unit #18 | Sec. 16, T. 11 S., R. 23 E. |
|---------------|----------|---------------------|-----------------------------|
|               | Gas Well | Rock House Unit #19 | Sec. 10, T. 11 S., R. 23 E. |
|               | Gas Well | Rock House Unit #17 | Sec. 9, T. 11 S., R. 23 E.  |
|               | Gas Well | Rock House Unit #14 | Sec. 10, T. 11 S., R. 23 E. |

#### 4. Proposed Casing:

| Hole   | Casing | g          | Grade    | Setting | Casing         |
|--------|--------|------------|----------|---------|----------------|
| Size   | Size   | Weight/Ft. | & Tread  | Depth   | New/Used       |
| 12 1/2 | 9 5/8  | 36         | J-55/STC | 300     | New            |
| 7 7/8  | 4 1/2  | 11.6       | J-55/LTC | T.D.    | Used/inspected |

#### Cement Program:

| Casing<br>Size | Cement<br>Type   | Cement<br>Amount | Cement<br><u>Yield</u> | Cement<br>Weight |
|----------------|--|------------------|------------------------|------------------|
| 9 5/8          | Class "G"<br>2% Calcium<br>1/4 #/sk cello flake            | 200 sks.         | 1.18 cu. ft./sk.       | 15.6 lbs./gal.   |
| 4 1/2          | Lead Class "G" 3 % salt 16% gell 10# Gilsonite/sk          | 200 sks          | 3.90 cu. ft./sk.       | . 11.0 lbs./gal. |
|                | Tail Class "G" 10% salt 10% gypsum 2% WR15 .4 lbs/sk FL 25 | 500 sks +/-      | 1.53 cu. ft./sk.       | . 14.8 lbs./gal. |

#### 5. BOP and Pressure Containment Data:

The anticipated bottom hole pressure will be less than 3000 psi.

A 3000 psi WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 9 5/8" surface casing. The BOP system including the casing will be pressure tested to the minimum standards set forth in "On Shore Order #2". The BOP will be mechanically checked daily during the drilling operation.

#### 6. Mud Program:

| Interval  | Mud weight lbs/gal. | Viscosity<br>Sec./Qt. | Fluid Loss MI/30 Mins. | Mud Type  |
|-----------|---------------------|-----------------------|------------------------|-----------|
| 0-300     | Air/Clear Water     |                       | No Control             | Water/Gel |
| 300-2000  | Clear Water         | +                     | No Control             | Water/Gel |
| 2000-T.D. | 8.4-8.6             | 30                    | No Control             | Water/Gel |

#### 7. Auxiliary Equipment:

Upper Kelly cock, full opening stabbing valve, 2 1/2" choke manifold and pit level indicator.

#### 8. Testing, Coring, Sampling and Logging:

a) Test:

None are anticipated.

b) Coring:

There is the possibility of sidewall coring.

c) Sampling:

Every 10' from 2000' to T.D.

d) Logging:

Type

Interval

DLL/SFL W/GR and SP

T.D. to Surf. Csg

FDC/CNL W/GR and CAL

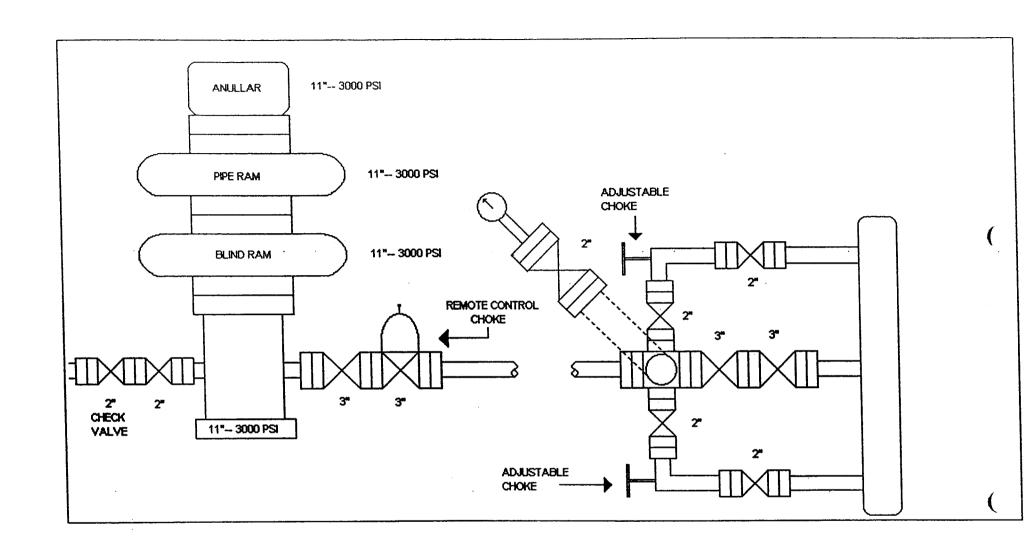
T.D. to Surf. Csg

#### 9. Abnormalities (including sour gas):

No abnormal pressures, temperatures or other hazards are anticipated. Oil and gas shows are anticipated in the Wasatch Formation. Other wells drilled in the area have not encountered over pressured zones or H2S.

#### 10. Drilling Schedule:

The anticipated starting date is March 1, 1998. Duration of operations expected to be 30 days.



# ROSEWOOD RESOURCES, INC. 13 POINT SURFACE USE PLAN

FOR WELL

**ROCK HOUSE UNIT #25** 

**LOCATED IN** 

NE 1/4, SE 1/4

SECTION 9, T. 11 S., R. 23 E., U.S.B.&M.

**UINTAH COUNTY, UTAH** 

**LEASE NUMBER: UTU-0780** 

SURFACE OWNERSHIP: FEDERAL

#### 1. Existing Roads

To reach the Rosewood Resources, Inc., Rock House Unit 25 well location, in Section 9, T11S, R23E, from Bonanza, Utah:

Starting in Bonanza, Utah proceed south on the paved road for 4 miles. Turn south (left) on the Book cliffs road (dirt road). Proceed south 3.9 miles to the Greeks Corrals. Turn west (right) at the fork in the road. Proceed 8.3 miles to the Asphalt Wash sign. Stay to the south (left) of the sign. Proceed .7 miles to the Rainbow sign. Stay to the west (right) of the sign. This is also called the Kings Wells road. Proceed 10.5 miles turn north (right) off the county road. Proceed .7 miles stay to the right at the intersection. Proceed 2.8 miles turn west (right). Proceed 1.4 miles to Saddletree Draw. Turn north (right) proceed .7 miles to the oil field access road. Turn (right) proceed .7 miles to the oil field access road to R.H. #19 turn (right) east. The proposed access road will start at that point.

All roads to the proposed location are State or County Class D roads except the last 1.2 miles of road.

Please see the attached map for additional details.

#### 2. Planned access road

The proposed location is adjacent to an existing road. Approximately 3,700 feet of new road construction will be required.

The road will be built to the following standards:

| A) | Approximate length            | 3,700 Ft.   |
|----|-------------------------------|-------------|
| B) | Right of Way width            | 30 Ft.      |
| C) | Running surface               | 18 Ft.      |
| D) | Surfacing material            | Native soil |
| E) | Maximum grade                 | 8%          |
| F) | Fence crossing                | None        |
| G) | Culvert                       | None        |
| H) | Turnouts                      | None        |
| I) | Major cuts and fills          | None        |
| Ĵ) | Road flagged                  | Yes         |
| K) | Access road surface ownership | Federal     |
| L) | All new construction on lease | Yes         |
| M) | Pipe line crossing            | One         |

Newly constructed roads will be built using native soils from borrow pits on either or both sides of the road.

Please see the attached location plat for additional details.

No right of way will be required. All surface disturbance for the road and location will be within the Unit boundary.

#### 3. Location of existing wells

The following wells are located within one mile radius of the location site.

| A) Producing wells                  | Gas Well<br>Gas Well<br>Gas Well<br>Gas Well | Rock House Unit a<br>Rock House Unit a<br>Rock House Unit a<br>Rock House Unit a | #19 Sec. 10, T. 11 S., R. 23 E.<br>#17 Sec. 9, T. 11 S., R. 23 E.                 |  |  |  |
|-------------------------------------|--|--|---|--|--|--|
| B) Water wells                      |  | None   |   |  |  |  |
| C) Abandoned wells<br>Gas V         |  | House Unit #16   | Sec. 15, T11S, R23E.  |  |  |  |
| D) Temporarily abandoned wells None |  |  |   |  |  |  |
| E) Disposal wells                   |  | None   |   |  |  |  |
| F) Drilling/permitted               | Rock<br>Rock                                 | House Unit # 22<br>House Unit # 26<br>House Unit # 27<br>House Unit # 28         | Sec. 15, T11S, R23E. Sec. 9, T11S, R23E. Sec. 9, T11S, R23E. Sec. 16, T11S, R23E. |  |  |  |
| G) Shut in wells                    |  | None   |   |  |  |  |
| H) Injection wells                  |  | None   |   |  |  |  |
| I) Monitoring or obs                | ervation wells                               | None   |   |  |  |  |

Please see the attached map for additional details.

### 4. Location of tank batteries, production facilities, and production gathering service lines.

All production facilities are to be contained within the proposed location site. Please see the attached plat plan for a typical gas well separator installation and well site piping.

All permanent (on site for more than six months or longer) structures constructed or installed will be painted a juniper green color. Facilities required to comply with O.S.H.A. (Occupational Safety and Health Act) will be excluded. The required paint color is Juniper Green.

All tanks will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank in the battery. The integrity of the dike will be maintained.

The operator will adhere to all site security guidelines and regulations identified in 43 cfr 3126.7.

All off lease storage, off lease measurement, commingling on lease or off lease, of production, will have prior written approval from the authorized officer.

A proposed surface gas line will be constructed and tied into an existing 6" line. The approximate length will be 2,850'. The proposed pipe line will be constructed adjacent to the access road. Please see the attached location diagrams for pipe line location. There will be no additional surface disturbances required for the installation of a gathering line. The line will be a 2" or 4" steel line. The line will be welded on the pad and access road. After welding the line will be pulled with a small cat to the tie in.

The gas meter run will be located within 500' of the well head. The gas line will be buried or anchored down from the well head to the meter. Meter runs will be housed and/or fenced.

The gas meter will be calibrated and the tank strapped in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The authorized officer will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration report will be submitted to the BLM's Vernal District office. All measurement facilities will conform with API and AGA standards for gas and liquid hydrocarbon measurement.

#### 5. Location and type of water supply

Water for drilling and cementing the subject well will be hauled by truck from Rosewoods water station in Section 13, T11S, R23E. A second location may be used, it would be Evacuation Creek permit # 49-1595. The Evacuation Creek distribution point is in Section 7, T11S, R25E. Water for completion will come from the same supply or Vernal City.

#### 6. Source of construction materials

All construction material for this location site and access road shall be borrow material accumulated during construction of the location site and access road. Additional road gravels or pit lining material will be obtained from private sources.

#### 7. Methods for handling waste disposal

#### A) Pit construction and liners:

The reserve pit will be approximately 10 ft. deep and most of the depth shall be below the surface of the existing ground. Please see the attached plat for details.

### The reserve pit will not be lined unless the pit is blasted or soil conditions would warrant a pit liner.

The reserve pit will not be used to store water for drilling. A semi-closed system will be used to drill the well. All fresh water for drilling will come from a frac tank placed on location and from the rig tank. The pit will be used to hold non-flammable materials such as cuttings, salt, drilling fluids, chemicals, produced fluids, etc.

#### B) Produced fluids:

Produced water will be confined to the reserve pit, or if deemed necessary, a storage tank for a period not to exceed 90 days after initial production. During the 90 day period an application for approval for a permanent disposal method and location will be submitted to the authorized officer.

#### C) Garbage:

A trash cage fabricated from expanded metal will be used to hold trash on location and will be removed to an authorized land fill location.

#### D) Sewage:

A portable chemical toilet will be supplied for human waste.

#### E) Site clean-up

After the rig is moved off the location the well site area will be cleaned and all refuse removed.

#### 8. Ancillary facilities

There are no ancillary facilities planned for at this time and none are foreseen for the future.

#### 9. Well-site layout

Location dimensions are as follow:

| A) | Pad length           | 325 ft.        |
|----|----------------------|----------------|
| B) | Pad width            | 155 ft.        |
| C) | Pit depth            | 10 ft.         |
| D) | Pit length           | 180 ft.        |
| E) | Pit width            | 50 ft.         |
| F) | Max cut              | 2.7 ft.        |
| G) | Max fill             | 3.6 ft.        |
| H) | Total cut yds        | 4,310 cu. yds. |
| I) | Pit location         | east side      |
| J) | Top soil location    | west side      |
| K) | Access road location | south end      |
| L) | Flare pit            | west corner    |

Please see the attached location diagram for additional details.

All pits will be fenced according to the following minimum standards:

- A) Thirty nine inch net wire shall be used with at least one strand of wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- B) The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.

- C) Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 ft.
- E) All wire shall be stretched by using a stretching device before it is attached to the corner posts.

#### 10. Plans for restoration of the surface

Prior to construction of the location, all trees will be removed from the location. The top 6 inches of soil material will be stripped off the location and the pit area. The top soil will amount to approximately 1,000 cubic yards of material. The top soil will be stockpiled in two distinct piles. Placement of the top soil is noted on the attached location plat. The top soil pile from the location will be seeded as soon as the soil is stock piled with the seed mix listed. When all drilling and completion activities have been completed and the pit backfilled the top soil from the pit area spread on the pit area. The pit area will be seeded when the soil has been spread. The unused portion of the location (the area outside the dead men.) will be recontoured

The dirt contractor will be provided with an approved copy of the surface use plan prior to construction activities.

Any drainage rerouted during the construction activities shall be restored to its original line of flow or as near as possible.

All disturbed areas will be recontoured to the approximate natural contours. Prior to back filling the pit the fences around the reserve pit will be removed.

The reserve pit will be reclaimed within 90 days of well completion. If the reserve pit has not dried sufficiently to allow back filling, an extension on the time requirement for back filling the pit will be requested. Once reclamation activities have begun, they shall be completed within 30 days.

After the reserve pit has been reclaimed, no depressions in the soil covering the reserve pit will be allowed. The objective is to keep seasonal rain fall and run off from seeping into the soil used to cover the reserve pit. Diversion ditches and water bars will be used to divert run off as needed.

When restoration activities have been completed, the location site and new access road cuts and shoulders shall be reseeded. Prior to reseeding, all disturbed areas will be scarified and left with a rough surface.

#### A) Seeding dates:

Seed will be spread when the top soil is stock piled and when reclamation work is performed.

Seed will be broadcast. If a drill is used the seed mix will be half the mix specified.

#### Seed Mix

Four wing salt brush 4#/acre

Western wheat grass 2#/acre

Shad Scale 3#/acre

Black Sage 3#/acre

#### 11. Surface ownership:

Access road Federal

Location Federal

Pipe line Federal

#### 12. Other information

#### A) Vegetation:

The vegetation coverage is slight. The majority of the existing vegetation consists of Pinion Pine trees and Juniper trees.

#### B) Dwellings:

There are no dwellings, or other facilities within a one mile radius of the location.

#### C) Archeology:

The location has been surveyed. A copy of that survey will be forwarded to your office.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the antiquities act of June 8, 1906) are discovered, all

operations which would effect such sites will be suspended and the discovery reported promptly to the surface management agency.

#### D) Water:

The nearest water is the Green River located 3 miles to the north.

#### E) Chemicals:

No pesticides, herbicides or other possible hazardous chemicals will be used without prior application.

#### F) Notification:

a) Location construction

At least forty eight (48) hours prior to construction of location and access roads

b) Location completion

Prior to moving on the drilling rig.

c) Spud notice

At least twenty-four (24) hours prior to spudding the well.

d) Casing string and cementing

At least twenty-four (24) hours prior to running casing and cementing all casing strings.

e) BOP and related equipment tests

At least twenty-four (24) hours prior to initial pressure tests.

f) First production notice

With in five (5) business days after the new well begins, or production resumes after well has been off production for more than ninety 90 days.

#### H) Flare pit

The flare pit will be located in corner B. The pit will be 100 feet from the bore hole. All fluids will be removed from the pit within 48 hours of occurrence.

#### 13. Lessees or Operator's representative and certification

#### A) Representative

Name:

William A. Ryan

Address:

Rocky Mountain Consulting

350 South, 800 East Vernal, Utah 84078

Telephone:

Office

801-789-0968

Fax

801-789-0970

Cellular

801-823-6152

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, onshore oil and gas orders, the applicable laws, regulations, and any applicable notices to lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

This drilling permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

#### B) Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route, that I am familiar with the conditions which presently exist, that the statements made in this plan are, to the best of my knowledge and belief, true and correct, and that the work associated with the operation proposed herein will be performed by Freedom Energy, Inc. and its contractors and subcontractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

Date Vec. 15

William A. Ryan

Agent

**Rocky Mountain Consulting** 

Onsite Date:

December 4, 1997

Participant on joint inspection:
William Ryan
Byron Tolman
Kim Bartel

Rocky Mountain Consulting BLM

BLM

#### Statement of use of Hazardous Material

No chemical(s) from the EPA's Consolidated list of Chemicals subject to Reporting Under Title III of the Superfund Amendments and Reauthorization, Act (SARA) of 1986. will be used, produced, transported, stored, disposed, or associated with the proposed action, No extremely hazardous substances, as defined in 40 cfr 355, will be used, produced, stored, transported, disposed, or associated with the proposed action.

If you require additional information please contact:

William A Ryan Agent for Rosewood Resources, Inc. Rocky Mountain Consulting 350 S. 800 E. Vernal Utah, 84078

Telephone (801) 789-0968 office (801) 823-6152 cellular (801) 789-0970 fax

#### **SELF-CERTIFICATION STATEMENT**

The following self-certification statement is provided per Federal requirements dated June 15, 1988.

Please be advised that Rosewood Resources, Inc., is considered to be the operator of the following well.

Rock House Unit #25 NE 1/4, SE 1/4, Section 9, T. 11 S., R. 23 E. Lease UTU-0780 Uintah County, Utah

Rosewood Resources, Inc., is responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage is provided by Certificate of Deposit, BLM Bond #UT-0627.

William A. Ryan

Agent

**Rocky Mountain Consulting** 

William a Tyon

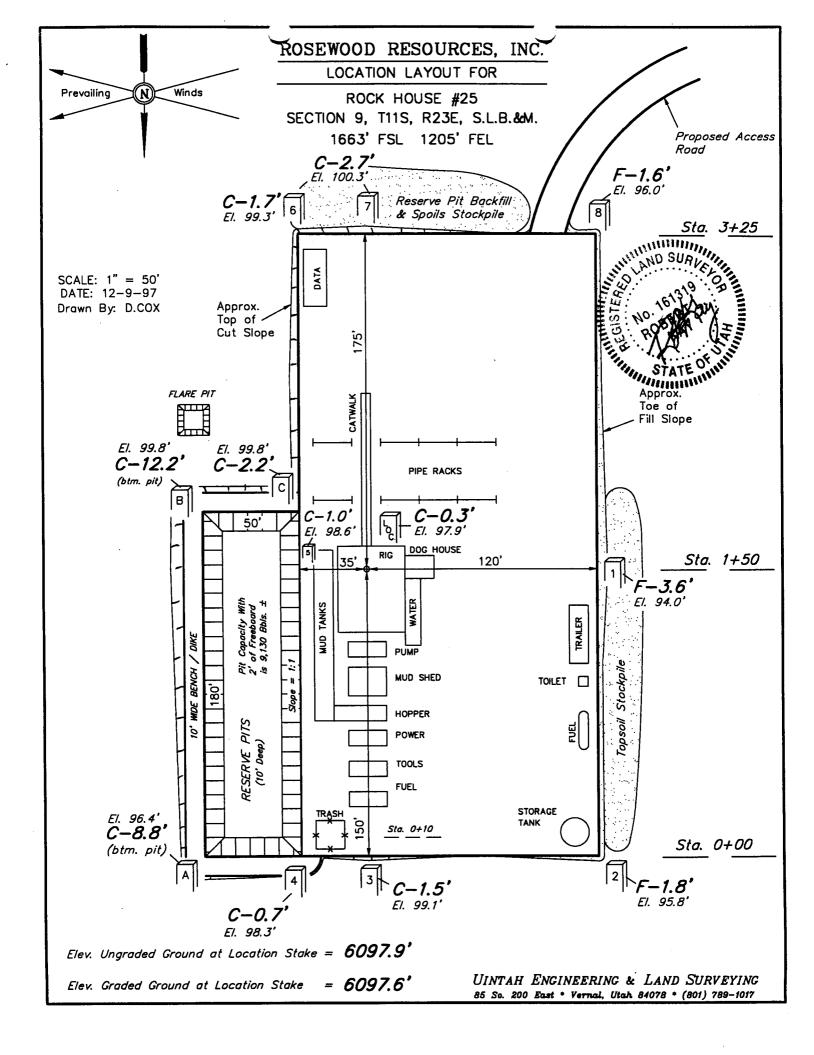
350 S. 800 E.

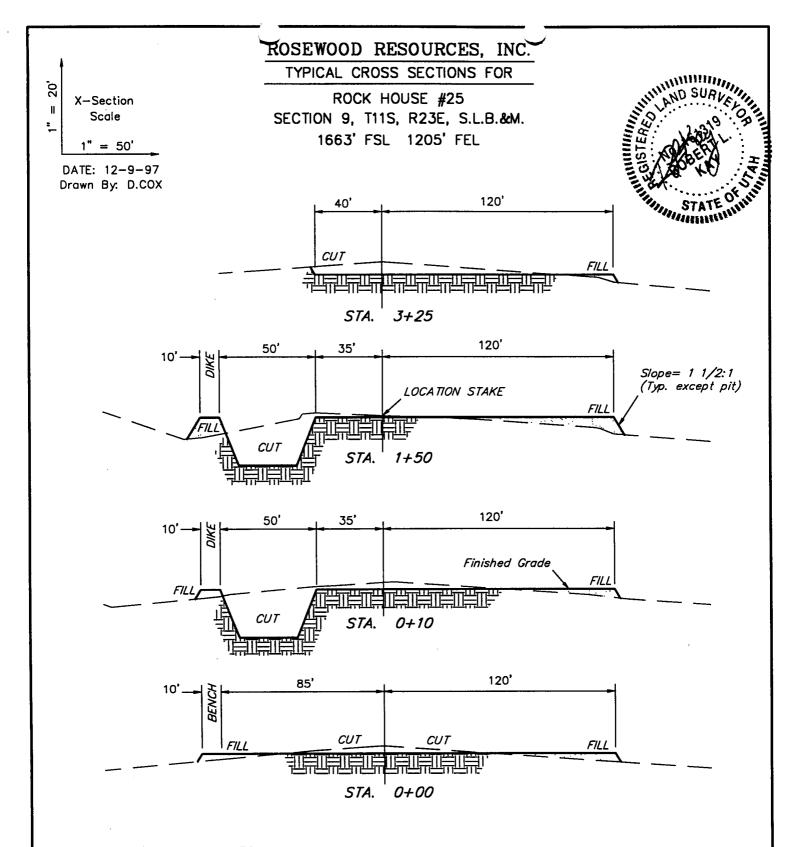
Vernal UT 84078

801-789-0968 Office

801-823-6152 Cell

801-789-0970 Fax





#### APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,100 Cu. Yds.

Remaining Location = 3,210 Cu. Yds.

TOTAL CUT = 4,310 CU.YDS.

FILL = 1,840 CU.YDS.

EXCESS MATERIAL AFTER

5% COMPACTION = 2,370 Cu. Yds.

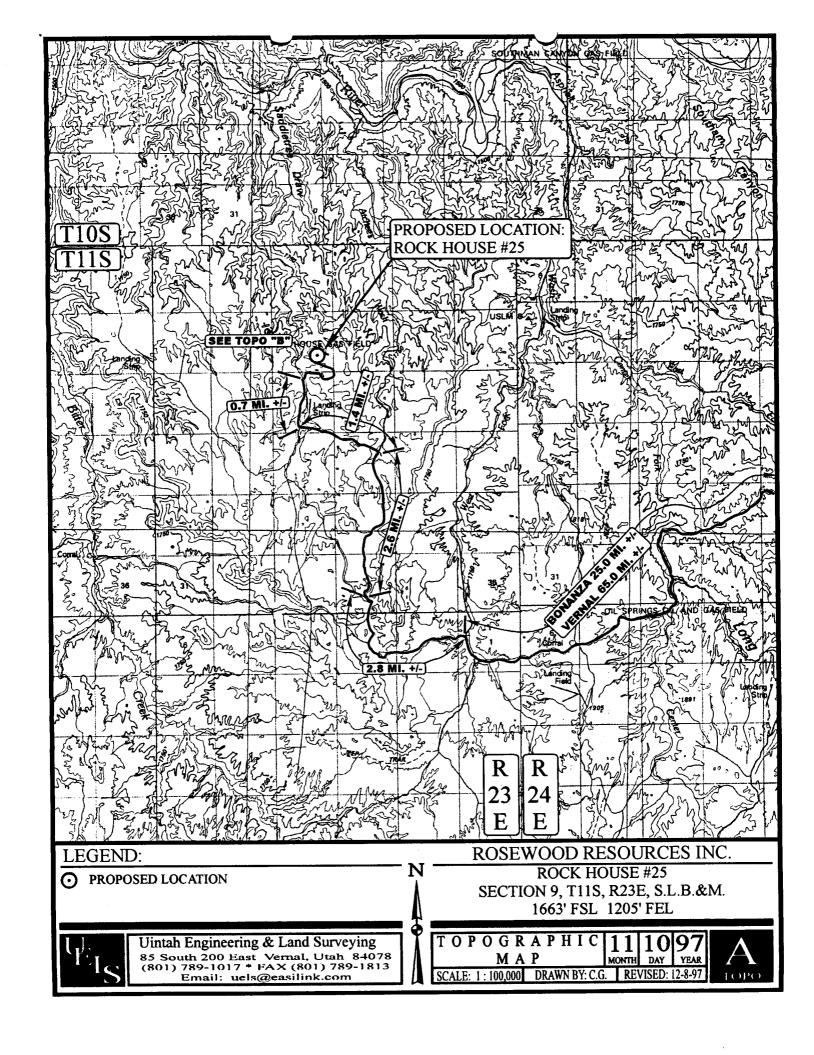
Topsoil & Pit Backfill = 2,360 Cu. Yds.

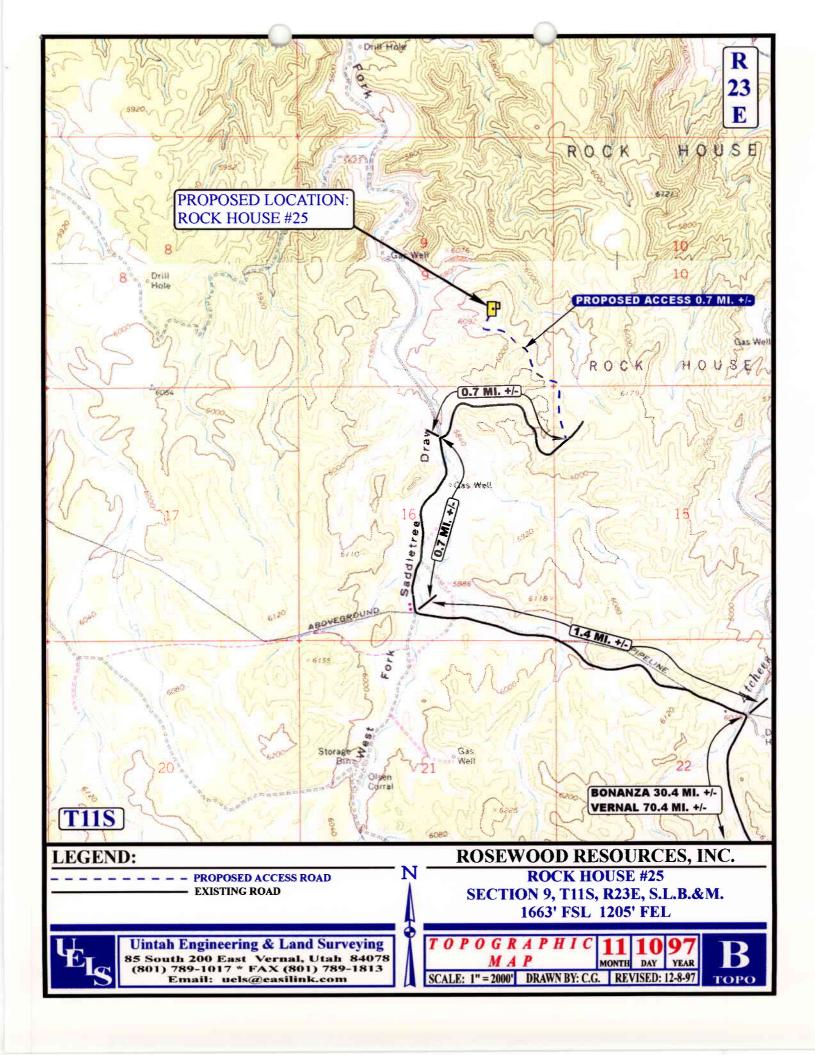
(1/2 Pit Vol.)

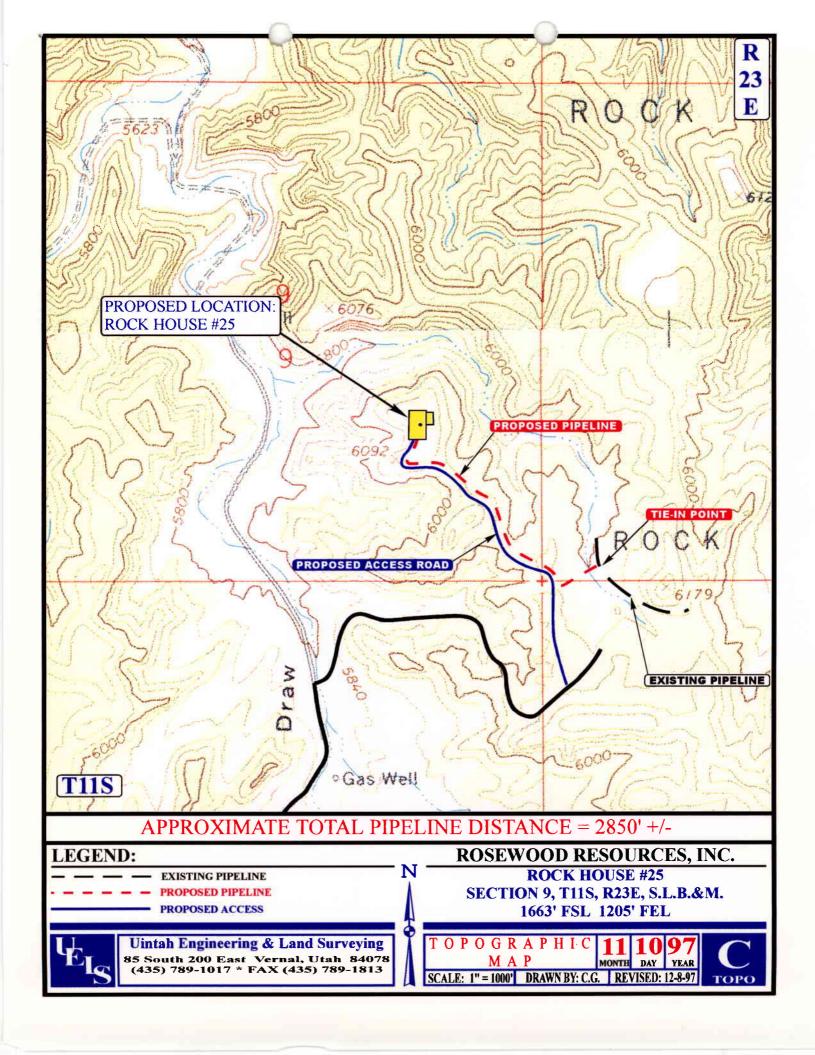
EXCESS UNBALANCE = 10 Cu. Yds.

(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East • Vernal, Utah 84078 • (801) 789-1017







### WORKSHEET APPLICATION FOR PERMIT TO DRILL

| APD RECEIVED: 12/15/97  | API NO. ASSIGNED: 43-047-33031   |
|---|--|
| WELL NAME: ROCK HOUSE UNIT #25 OPERATOR: ROSEWOOD RESOURCES (N'   | 7510)  |
| PROPOSED LOCATION: NESWE 09 - T11S - R23E SURFACE: 1663-FSL-1205-FEL BOTTOM: 1663-FSL-1205-FEL UINTAH COUNTY ROCK HOUSE FIELD (670)  LEASE TYPE: FED LEASE NUMBER: UTU - 0780  PROPOSED PRODUCING FORMATION: MVRD | INSPECT LOCATION BY: / / TECH REVIEW Initials Date Engineering Geology Surface   |
| RECEIVED AND/OR REVIEWED:  Plat Bond: Federal M State[] Fee[] (Number M1-0627  Potash (Y/N) N Oil shale (Y/N) Water permit (Number 49-1595  RDCC Review (Y/N) (Date:)   | LOCATION AND SITING: R649-2-3. Unit:ROCK HOUSE R649-3-2. General. R649-3-3. Exception. Drilling Unit. Board Cause no:Date: |
| COMMENTS:   |  |
| STIPULATIONS: (1) FEDERAL   | Δρραθυάζ   |
|   | •  |
|   |  |

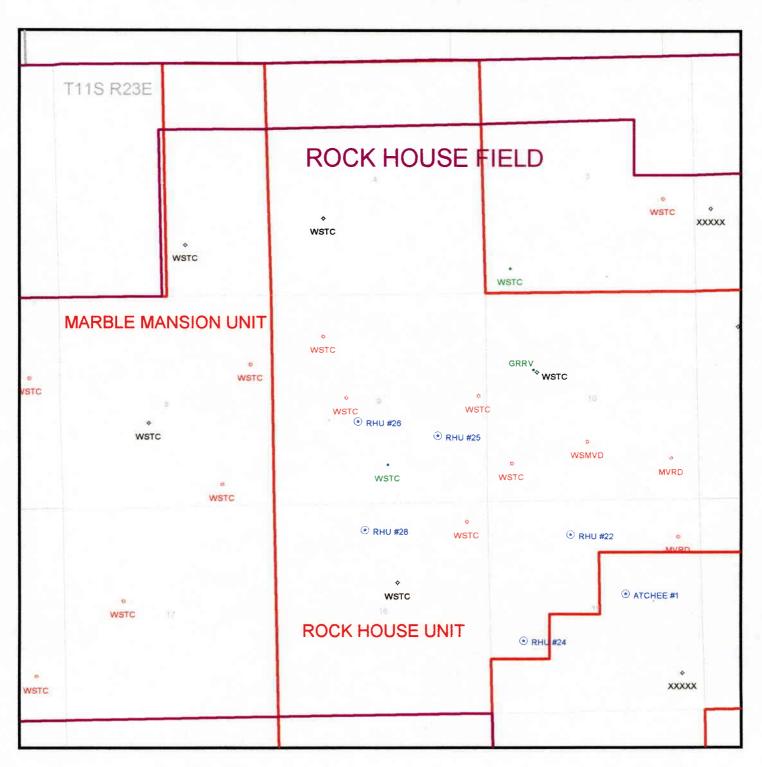


OPERATOR: ROSEWOOD RESOURCES (N7510)

FIELD: ROCK HOUSE (670)

SEC. TWP. RNG.: SEC. 9, T11S, R23E

COUNTY: UINTAH UAC: R649-2-3 ROCK HOUSE



Michael O. Leavitt Governor Ted Stewart Executive Director Lowell P. Braxton Division Director 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

April 1, 1998

Rosewood Resources, Inc. 100 Crescent Court, Suite 500 Dallas, Texas 75201

Re: Rock House Unit 25 Well, 1663' FSL, 1205' FEL, NE SE, Sec. 9, T. 11 S., R. 23 E., Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33031.

S<del>in</del>gerely,

John R. Baza

/Associate Direct<del>or</del>

lwp

Enclosures

cc: Uintah County Assessor

Bureau of Land Management, Vernal District Office

| Operator: _                            |       | Rosewood Resources, Inc. |     |    |    |    |    |       |
|--|-------|--------------------------|-----|----|----|----|----|-------|
| Well Name & Number: Rock House Unit 25 |       |                          |     |    |    |    |    |       |
| API Number:                            |       | 43-047-33031             |     |    |    |    |    |       |
| Lease:                                 |       | UTU-C                    | 780 |    |    |    |    |       |
| Location                               | NE SE | Sec                      | 9   | Т. | 11 | S. | R. | 23 E. |

#### Conditions of Approval

- 1. General
  - Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.
- Notification Requirements
   Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jim Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or John R. Baza at (801) 538-5334.

- 3. Reporting Requirements
  All required reports, forms and submittals shall be promptly
  filed with the Division, including but not limited to the
  Entity Action Form (Form 6), Report of Water Encountered
  During Drilling (Form 7), Weekly Progress Reports for
  drilling and completion operations, and Sundry Notices and
  Reports on Wells requesting approval of change of plans or
  other operational actions.
- 4. State approval of this well does not supercede the required federal approval which must be obtained prior to drilling.

Form 3/60-3 (November 1983) (formerly 9-331C)

# UN\_ED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN TRIPLICATE. (Other instruct OD

|    | Form approved. Budget Bureau No. Expires August 31, |            |
|----|---|------------|
| 5. | LEASE DESIGNATION AND                               | BERIAL NO. |

|  | BUREAU OF LAND MANAGEMENT   |                                |                           |  |                   | UTU- <del>0780</del> 0779                                 |   |  |  |
|--|---|--------------------------------|---------------------------|--|-------------------|---|---|--|--|
| APPLICATIO   |   |                                |                           |  | ACK               | 6. IF INDIAN, ALLOTTER                                    | OR TRIBE NAME                                       |  |  |
| . TYPE OF WORK   | DRILL XX DEEPEN   PLUG BACK   |                                |                           |  |                   | 7. UNIT, AGREEMENT NAME<br>Rock House Unit                |   |  |  |
| WELL T   | VELL OTHER  |                                | SINGLE MULTIPLE CONS      |  |                   | 8. FARM OR LEASE NAME Rock House Unit                     |   |  |  |
| Rosewood Resources, Inc.   |   |                                |                           |  |                   | 9. WELL NO.<br>#25  |   |  |  |
| 100 Crescent C   |   | 10. FIELD AND POOL, OR WILDCAT |                           |  |                   |   |   |  |  |
| A P DOI PORTAGE  | ocation of well (Report location clearly and in accordance with any State requirements.*) 1663' FSL, 1205' FEL, NE1/4, SE1/4, Sec. 9, T11S, R23E                    |                                |                           |  |                   |   | 11. SEC., T., R., M., OR BLK.<br>AND SURVEY OR AREA |  |  |
| At proposed prod. so   |   |                                | •                         |  |                   | SEC. 9, T 11 S, R 23 E.  12. COUNTY OR PARISH   13. STATE |   |  |  |
| . DISTANCE IN MILES 33.2 MILES S   | AND DIRECTION FROM NEAR<br>OUTH OF BONAN  | NZA, UT                        |                           |  |                   | UINTAH  | UT  |  |  |
| D. DISTANCE FROM PROPUSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig, unit line, if any) |   |                                | 16. NO. OF ACRES IN LEASE |  | TO T              | 17. NO. OF ACRES ASSIGNED TO THIS WELL 40                 |   |  |  |
| DIOMANON PROM PRO  | POSED LOCATION®<br>DRILLING, COMPLETED.   | 1400'                          | 19. Pi                    | 5700 DEPTH   | 20. ROTA          | ROTARY  22. APPROX. DATE WORK WILL START*                 |   |  |  |
| . ELEVATIONS (Show w   | 6098'   |                                |                           |  |                   | March 1, 199  |   |  |  |
|  |   | PROPOSED CASI                  | NG AN                     | D CEMENTING PROGRAM                                      | I                 |   |   |  |  |
| size of Hole   | BIZE OF CASING  | WEIGHT PER F                   | 00T                       | BETTING DEPTH  |                   | QUANTITY OF CEMENT  | E   |  |  |
| 7 7/8  | 4 1/2 11.6  |                                | <del></del>               | T.D.   |                   | CMT TOP TO COVER THE OIL SHALE                            |   |  |  |
| <i>t.</i>  | OPERATOR REQUESTS PERMISSION TO DRILL THE SUBJECT PLEASE SEE THE ATTACHED 10 POINT AND THE 13 POINT SU USE PLAN.  IF YOU REQUIRE ADDITIONAL INFORMATION PLEASE CONT |                                |                           |  |                   |   | ACE   |  |  |
|  |   |                                | DHIC                      | JNAL INFORMAT  | .ION F            | LEASE CONTINC   |   |  |  |
|  | WILLIAM A. R<br>350 S., 800 E.  |                                | . (7                      |  | 1 ===             | JAN 0 5 1998  |   |  |  |
|  | VERNAL,<br>801-789-09   | UTAH                           |                           | 801-823-6152   |                   | JUN 08 1998   |   |  |  |
| ABOVE SPACE DESCRIBING. If proposal is to  | BE PROPOSED PROGRAM: If<br>o drill or deepen direction<br>ny.   | proposal is to dee             | pen or ;<br>t data (      | plug back, give data on pr<br>on subsurface locations an | esent publication | hiche del ant proposed<br>d and true vertical vertical    | MENTING   |  |  |
| signed   | 1 + 11 \ 11 \ 11  | 7 en TI                        | TLB                       | AGENT  |                   | DATE — Dec 1  | 5, 1997   |  |  |
| (This space for Fe   | STICE OF APPR   | OVAL                           |                           | APPROVAL DATE  |                   |   |   |  |  |
| PERMIT NO.   | and Cleave  | 49 71                          | A                         | ssistant Field Manage<br>Mineral Resources               | er                | DATE 6/2  | /98   |  |  |
| CONDITIONS OF APPRO  | OVAL, IF ANY:   |                                |                           |  | COLO              | To the state of the                                       | e e e e e e e e e e e e e e e e e e e               |  |  |

#### **CONDITIONS OF APPROVAL** APPLICATION FOR PERMIT TO DRILL

| Company/Operator: Rosewood Resources, Inc.                       |
|--|
| Well Name & Number: Rock House 25                                |
| API Number: <u>43-047-33031</u>                                  |
| Lease Number: U - 0779   |
| Location: <u>NESE</u> Sec. <u>09</u> T. <u>11S</u> R. <u>23E</u> |

#### **NOTIFICATION REQUIREMENTS**

at least forty-eight (48) hours prior to construction of **Location Construction** 

location and access roads.

prior to moving on the drilling rig. **Location Completion** 

at least twenty-four (24) hours prior to spudding the well. Spud Notice

at least twenty-four (24) hours prior to running casing and Casing String and

cementing all casing strings. Cementing

at least twenty-four (24) hours prior to initiating pressure **BOP** and Related

**Equipment Tests** tests.

Notice

within five (5) business days after new well begins, or First Production

production resumes after well has been off production for

more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

#### CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Orders, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

#### A. DRILLING PROGRAM

1. <u>Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are</u> Expected to be Encountered

Report <u>ALL</u> water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

#### 2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a <a href="Mailto:3M">3M</a> system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

#### 3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany oil shale zone, identified at 1,309 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

#### 4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

#### 5 .Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to the top of the cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

#### 6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

<u>Immediate Report</u>: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

COAs Page 5 of 9 Well No.: Rock House 25

A schematic facilities diagram as required by 43 CFR 3162.7-5(d) shall be submitted to the appropriate Field Office within 60 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (1).

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

#### 7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted on initial meter installations and at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

COAs Page 6 of 9 Well No.: Rock House 25

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

The APD approval is for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman (801) 789-7077 Petroleum Engineer

Wayne P. Bankert (801) 789-4170

Petroleum Engineer

Jerry Kenczka (801) 781-1190

Petroleum Engineer

BLM FAX Machine (801) 781-4410

#### EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

COAs Page 8 of 9 Well No.: Rock House 25

## CONDITIONS OF APPROVAL FOR THE SURFACE USE PROGRAM OF THE APPLICATION FOR PERMIT TO DRILL

-Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).

-The road shall be constructed/upgraded to meet the standards of the traffic flow and all-weather road requirements. anticipated Construction/upgrading shall include ditching, draining, and crowning (2 to 3%). Graveling or capping the roadbed will be required as necessary well constructed safe road. provide a construction/upgrading, the proposed road surface or existing road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Should mud holes off the 30 foot right-of-way will not be allowed. develop, they shall be filled in to prevent detours. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. When snow is removed from the road during the winter months, the snow should be pushed outside of the burrow ditches and the turn outs should be kept clear so that when the snow melts the water will be channeled away from the road.

-The reserve pit will be lined with a plastic nylon reinforced liner of at least 12 mils in thickness. There will be enough straw or dirt between the liner and rocks to protect the liner from tears. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O.

-The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

-Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities. (The BLM does not seek to compete with private industry. There are commercial facilities available for stacking and storing drilling rigs).

COAs Page 9 of 9 Well No.: Rock House 25

- -The location topsoil pile should be seeded immediately after the soil is piled by broadcasting the seed mix identified in the APD, then walking the topsoil pile with the dozer to plant the seed.
- -Once the reserve pit is dry, it should be filled, recontoured, topsoil spread, and seeded in the same manner discussed above.
- -The access road should be signed at the beginning stating that it is a well service road that ends in 0.7 mile.
- -If vertebrate fossils are encountered during construction of the well site or the access road, the project paleontologist must be notified immediately to evaluate the discovery.

## DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

| Name of Company: ROSEWOOD RESOURCES  |  |
|--|--|
| Well Name: ROCK HOUSE UNIT # 25  |  |
| Api No. 43-047-33031   |  |
| Section <u>9</u> Township <u>11S</u> Range <u>23E</u> County <u>UINTAH</u> |  |
| Drilling Contractor  |  |
| Rig #  |  |
| SPUDDED:   |  |
| Date 6/19/98   |  |
| Time   |  |
| How_DRY HOLE   |  |
| Drilling will commence   |  |
| Reported by LUCI   |  |
| Telephone #  |  |
| Dato: 6/20/08 Signed: JLT  |  |

|        |          |             | THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAM |  |
|--------|----------|-------------|--|--|
| OORESS | P.O. Box | <u>k_16</u> | 68   |  |
|        | Vernal,  | UT          | 84078  |  |

| В          | ENTITY NO. | C.11111110. |             | WELL NAME                |        |     | WELL I | OCATION | 1      | SPUD    | EFFECTIVE |
|------------|------------|-------------|-------------|--------------------------|--------|-----|--------|---------|--------|---------|-----------|
| В          |            | 1           |             |                          | ÚÓ     | SC  | TP     | RG      | COUNTY | DATE    | DATE      |
|            |            | 12396       | 4304733101  | HANGING ROCK FED I #12-9 | NESE   | 12  | 125    | 23E     | UINTAH | 6/20/09 | 6/20/08   |
| HELL I CO  | MMEHTS:    |             |             |                          |        |     | 123    | Z3E     | OTMINU | 6/20/98 | 6/20/98   |
| Add        | to Hangir  | ng Rock U   | nit (non f. | F.) Entitles added 6-3   | 30-18. | Lee |        |         |        |         |           |
| B          | 99999      | 02025       | 4304733031  | ROCK HOUSE FEDERAL #25   | NESE   | 9   | 118    | 23E     | UINTAH | 6/19/98 | 6/19/98   |
| MEFF 5 CU  |            |             |             |                          |        |     | •      | ·       |        |         |           |
| Add        | to Rock H  | louse Uni   | : Cwsle-m   | urd P.A.)                |        |     |        |         |        |         | ·         |
|            |            |             |             |                          |        |     |        |         |        |         |           |
| WELL 3 CII |            |             |             |                          |        |     |        |         |        |         | 1         |
| WELL 4 CO  | MHENTS:    |             |             |                          |        |     |        |         |        |         |           |
|            |            |             |             |                          |        |     |        |         |        |         |           |
| WELL 5 CU  | PRHETALS : |             |             |                          |        |     |        |         |        |         |           |

HOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

Assistant

Phone No. (435) 789-0414

A - Establish new entity for new well (single well only) D - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

O - Re-assign well from one existing entity to a new entity

E - Other (explain in comments section)

FORM 3160-5 **FORM APPROVED** DEPARTMENT OF THE INTERIOR (June 1990) Budget Bureau No. 1004-0135 **BUREAU OF LAND MANAGEMENT** Expires: March 31, 1993 5. Lease Designation and Serial No. SUNDRY NOTICES AND REPORTS ON WELLS UTU-0779 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reenter a different reservoir. Use "APPLICATION FOR PERMIT -" for such proposals N/A 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE **ROCK HOUSE UNIT** 1. Type of Well 8. Well Name and No. **ROCK HOUSE UNIT #25** 9. API Well No. 43-047-33031 2. Name of Operator ROSEWOOD RESOURCES, INC. 10. Field and Pool, or Exploratory Area 3. Address and Telephone No. P.O. Box 1668, Vernal, UT 435-789-0414 11. County or Parish, State 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) **UINTAH CO., UTAH** 1663' FSL 1205' FEL, NE/SE Section 9, T11S, R23E 12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Altering Casing Conversion to Injection Final Abandonment Notice Other Spud Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\* Operator reports the above referenced well was spud on 6/19/98 @ 9:00 p.m. by Bill Jr's Rathole Service. (See attached report for setting of surface casing.) DIV. OF OIL, GAS & MINING COPIES: ORIG. & 2-BLM; DIV. OG&M; J MCQUILLEN 14. I hereby certify that the foregoing is true and correct Title Administrative Assistant Date 07/01/98 Signed (This space for Federal or State office use) Date Approved by Conditions of approval, if any:

## — DAILY DRILLING REPORT

| LEASE:<br>WELL: | ROCK I      | HOUSE<br>\$25 |               |             | DATE:       | 6/21/98              | CURRENT DEPTH<br>PROPOSED TD |            |
|-----------------|-------------|---------------|---------------|-------------|-------------|----------------------|------------------------------|------------|
|                 |             |               |               |             |             |                      | FOOTAGE PAST 24 HRS          | 537'       |
| PRESEN          | NT OPER     | RATION:       | WAIT O        | N ROTA      | RY TOOLS    | <b>,</b>             | ENGINEER                     | D.WIDNER   |
|                 |             |               |               |             |             |                      | CONSULTANT                   | D. KULLAND |
| ROM             | то          |               |               |             | ACTIVITY P  | AST 24 HRS:          |                              |            |
|                 |             | MIRU BILL     | MARTIN J      | R. RATHOL   | E RIG & SPU | D WELL @ 9:00 PM 6   | -19-98                       |            |
|                 |             |               | )' 12 1/4" HO |             |             |                      |                              |            |
|                 |             | LD DP         |               |             |             |                      |                              |            |
|                 |             | RIH W/ 14     | JTS 9 5/8"    | 36# J-55 ST | C CSG. SET  | @ 522' GL            |                              |            |
|                 |             | _             |               |             |             | ENT W/ 2% CaCl & .29 | 5#/sk CELLO-FLAKE            |            |
|                 |             | HAD GOO       | D RETURN      | S & CEME    | NTED TO SUF | RFACE!               |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
|                 |             |               |               |             |             |                      |                              |            |
| •               |             |               |               | <u> </u>    |             |                      |                              |            |
| MUD PROI        | PERTIES:    | _             |               | _           |             |                      | DAILY                        | COSTS:     |
| WT              |             | % OIL         |               | Ca+         |             |                      | FOOTAGE                      | 1504       |
| VIS             |             | %SAND         |               | cake        |             |                      | DAYWORK                      |            |
| WL              |             | %SOLID        |               | ] pH        |             |                      | LOCATION                     |            |
| HTHP            |             | ALK           |               |             | DAILY M     | UD COST              | MUD                          |            |
| PV              |             | CI-           |               |             | CUM. M      | UD COST              | RIG MOVE                     |            |
| YP              |             |               |               |             |             |                      | SURVEYOR                     |            |
|                 |             |               |               |             |             |                      | LOGGING                      |            |
| PUMP DAT        | Г <u>А:</u> | •••           | -             |             | HYDRAULIC   | s:                   | MUD LOG                      |            |
|                 | 11          | 2             |               |             | _           |                      | CEMENTING                    | 612        |
| MAKE            | Omega       | Emsco         | ]             |             | WOB _       |                      | FISHING                      |            |
| MODEL           | 750         | 500           |               |             | RPM _       |                      | WATER                        | 30         |
| INER            | 8X6.5       | 7X6           |               |             | GPM _       |                      | WELLHEAD                     |            |
| SPM             |             |               | ]             |             |             |                      | CSG CREW                     |            |
| PSI             |             |               | ]             |             |             |                      | RENTALS                      |            |
|                 |             |               |               |             |             |                      | CASING                       | 672        |
| BIT RECO        | RD:         |               |               | SURVEY I    | DATA:       |                      | SUPERVISION                  | 50         |
|                 | <del></del> |               | -             |             |             |                      | CASING HEAD                  |            |
| 3it #           | 1           | 2             | 1             | DEPTH       | DEGREES     |                      |                              |            |
| Ser#            |             |               | 1             |             |             |                      | TOTAL DAILY                  | 2868       |
| Size            |             |               | ]             |             |             |                      | COST FORWARD                 |            |
| /lake           |             |               | ]             |             |             |                      | CUM.TO DATE                  | 2868       |
| Гуре            |             |               | <b>]</b>      |             |             |                      |                              |            |
| lets            |             |               |               |             | <u> </u>    |                      |                              |            |
| n <b>@</b>      |             |               | ļ             |             |             | ADDITION             | AL COMMENTS:                 |            |
| Out @           |             |               | <b>j</b>      |             |             |                      |                              |            |
| eet             |             |               |               |             |             |                      |                              |            |
| irs             |             |               |               |             |             |                      |                              |            |
| t∕Hr            |             |               |               |             |             |                      |                              |            |
| cum l           | I           |               | 1 !           |             | 1           |                      |                              |            |

| FORM 3160-6  | FORM APPROVED                                     |   |
|--|---|---|
| (June 1990) DEPARTMENT (   | Budget Bureau No. 1004-0135                       |   |
| BUREAU OF LAI  | ND MANAGEMENT                                     | Expires: March 31, 1993                     |
|  | 5. Lease Designation and Serial No.               |   |
| SUNDRY NOTICES AND REPOR   | RTS ON WELLS                                      | UTU-0779                                    |
| Do not use this form for proposals to drill or to                | 6. If Indian, Allottee or Tribe Name              |   |
| Use "APPLICATION FOR PERM  |   | N/A   |
|  | To such proposals                                 | 17/0  |
|  |   | 7. If Unit or CA, Agreement Designation     |
| SUBMIT IN TRI  | PLICATE   | ROCK HOUSE UNIT                             |
| 1. Type of Well  |   | ROCK HOUSE GIVIT                            |
|  |   | 8. Well Name and No.                        |
| Oil Gas  |   | o. Trains and tro.                          |
| Well X Well Other  |   | ROCK HOUSE UNIT #25                         |
|  |   | 9. API Well No.                             |
| 2. Name of Operator  |   | 43-047-33031                                |
| ROSEWOOD RESOURCES, INC.   |   | 10. Field and Pool, or Exploratory Area     |
| 3. Address and Telephone No.                                     |   |   |
| P.O. Box 1668, Vernal, UT  | 435-789-0414                                      | 11. County or Parish, State                 |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Des    | • •   | LUNITALLOG LITALI                           |
| 1663' FSL 1205' FEL, NE/SE Section 9, T11                        | 5, R23E   | UINTAH CO., UTAH                            |
| 12. CHECK APPROPRIATE BOX  | ((es) TO INDICATE NATURE OF NOTIC                 | F REPORT OR OTHER DATA                      |
| TYPE OF SUBMISSION   |   | OF ACTION                                   |
|  |   |   |
| Notice of Intent   | Abandonment                                       | Change of Plans                             |
| <del></del>  | Recompletion                                      | New Construction                            |
| X Subsequent Report  | Plugging Back                                     | Non-Routine Fracturing                      |
| <b>1</b>   | Casing Repair                                     | Water Shut-Off                              |
| Final Abandonment Notice   | Altering Casing                                   | Conversion to Injection                     |
| <b></b>  | X Other WEEKLY                                    | Dispose Water                               |
|  | (Note: Report results of multiple com             |   |
|  | Completion or Recompletion Report a               |   |
| 13. Describe Proposed or Completed Operations (Clearly sta       |   | •     |
| work. If well is directionally drilled, give subsurface location | ons and measured and true vertical depths for all | markers and zones pertinent to this work.)* |
| MERCH VOTATIO MINI OLIMANDI EDI                                  | DIG #4 0NEW PD# 1 ED TO T                         |   |
| WEEKLY STATUS - MIRU CHANDLER                                    |   | <del>-</del>                                |
| 4-1/2" CSG. RIG WAS RELEASED @ 2                                 | 2:00 P.M. 7/13/98. SEE ATTACH                     | ED RIG REPORTS.                             |
|  |   |   |
| CURRENT STATUS - WAITING ON CO                                   | MPLETION  |   |
|  |   |   |
|  |   | \\  JUL 28 1998     //                      |
|  |   | 1771  |
|  |   | DIV OF OUR OAR S ASSESSED                   |
|  |   | DIV. OF OIL, GAS & MINING                   |
| COPIES: ORIG. & 2-BLM; DIV. OG&M J M                             | CQUILLEN  |   |
| 14. I hereby certify that the foregoing is true ar               | d correct   |   |
| Signed Kus Memer   | Title Administrative Assista                      | nt Date 07/23/98                            |
| (This space for Federal of/State office use)                     |   |   |
| Approved by  | Title   | Date  |
| Conditions of approval, if any:                                  |   |   |
| Commence of approved a surj.                                     |   |   |

CUM Grade

## DAILY DRILLING REPORT

LEASE: ROCK HOUSE DATE: 7-6-98 CURRENT DEPTH 690 WELL: #25 PROPOSED TD 5700 RIG: Chandler Rig # 1 **FOOTAGE PAST 24 HRS** 153 PRESENT OPERATION: Drilling **ENGINEER D.WIDNER** CONSULTANT **C.EMERSON FROM** TO **ACTIVITY PAST 24 HRS:** 0700 2130 MIRU Chandler #1. Notify E.Forsman w/ BLM. Left Message w/ Utah Div O&G 7-3-98 @ 1000hrs 2130 0130 RU Single Jack Testers. Test Upper & Lower Kelly Valves, TIW Valve, Kill Line & Valves, Choke Line & Valves, Choke Manifold, Pipe Rams & Blind Rams ALL to 3000psi. Test Annular Preventer & Surface Casing to 1500psi. 0200 0130 Finish Rigging Up Flare Line. 10200 0230 Install Wear Bushing 0230 0400 PU BHA #1 Tag @ 455 0400 0500 Drillout Cement Baffle & Shoe. 0530 0500 Drilling 537-576 0600 0530 Survey 1/4deg @ 536 0600 10700 Drilling 576'-690 **MUD PROPERTIES: DAILY COSTS:** WT % OIL Ca+ **FOOTAGE** 2195 VIS %SAND cake DAYWORK %SOLID WL pН LOCATION 4200 HTHP ALK DAILY MUD COST MUD PV Cl-**CUM. MUD COST** 12500 **RIG MOVE** YP **SURVEYOR** LOGGING **PUMP DATA: HYDRAULICS:** 550 **MUD LOG** 2 CEMENTING MAKE **EMSCO** GarDenv WOB All **FISHING** MODEL PZ-8 D-500 **RPM** 3030 50 WATER LINER 5 1/2 6 1/2 **GPM** 359 WELLHEAD SPM 110 **CSG CREW** PSI 900 **RENTALS** 2750 CASING BIT RECORD: 500 **SURVEY DATA:** SUPERVISION 2200 CASING HEAD Bit # 2 **DEPTH DEGREES BOP TEST** 887 Ser# D83417 536 1/4 28812 **TOTAL DAILY** Size 7 7/8" 28686 **COST FORWARD** Make RTC **CUM.TO DATE** 57498 HP53A Type ADDL COMMENTS: BHA#1: Bit,MM,FS,24-DC,XO=723.53' **Jets** 2/13-1/14 In @ 537 **WASATCH TOP: MESA VERDE TOP:** Out @ 153 SHOW: Feet 1 1/2 Hrs 102 **Ft/Hr** 

## DAILY DRILLING REPORT

**LEASE: ROCK HOUSE** 

DATE: 7-12-98

**CURRENT DEPTH** PROPOSED TD

WELL: #25

RIG: Chandler Rig # 1

FOOTAGE PAST 24 HRS \_\_

5700

PRESENT OPERATION: Circ & Cond f/ Logs

ENGINEER CONSULTANT C.EMERSON

D.WIDNER

| то   | ACTIVITY PAST 24 HRS:                        |
|------|--|
| 0730 | Survey 5 deg @ 5375                          |
| 1530 | Drilling 5370'-5584'                         |
| 1900 | TOOH f/ Mud Motor. 1st 2 Stands Tight        |
| 2200 | TIH w/ Bit # 4                               |
| 2300 | Wash & Ream 60' to Bottom.                   |
| 0630 | Drilling 5584- 5700TD @ 0630 7-12-98         |
| 0700 | Circ & Cond Hole                             |
| -    |  |
|      |  |
|      |  |
|      |  |
|      |  |
|      |  |
|      |  |
|      |  |
|      | 0730<br>1530<br>1900<br>2200<br>2300<br>0630 |

| MUD | PRC | PER | TIES: |
|-----|-----|-----|-------|
|     |     |     |       |

| UD PRO <u>PERTIES:</u> |      |        |     |  |  |  |
|------------------------|------|--------|-----|--|--|--|
| WT                     | 9.6  | % OIL  | 0   |  |  |  |
| VIS                    | 48   | %SAND  | TR  |  |  |  |
| WL                     | 7.6  | %SOLID | 9.2 |  |  |  |
| GELS                   | 8/17 | ALK    | .6  |  |  |  |
| PV                     | 25   | CI-    | 800 |  |  |  |
| ΥP                     | 18   |        |     |  |  |  |

| Ca+  | 40   |
|------|------|
| cake | 2/32 |
| pН   | 9.5  |
| pri  | 9.5  |

| 9.5     |         |       |
|---------|---------|-------|
| DAILY M | UD COST | 4063  |
| CUM. M  | UD COST | 16199 |

| į | JP | ۱IL | Y. | C | O | S | S |  |
|---|----|-----|----|---|---|---|---|--|
|   |    |     |    |   |   |   |   |  |

| FOOTAGE  | 4735 |
|----------|------|
| DAYWORK  |      |
| LOCATION |      |
| MUD      | 4063 |
| RIG MOVE |      |
| SURVEYOR |      |
| LOGGING  |      |

#### **PUMP DATA:**

|       | 1     | 2       |
|-------|-------|---------|
| MAKE  | EMSCO | GarDenv |
| MODEL | D-500 | PZ-8    |
| LINER | 5 1/2 | 6 1/2   |
| SPM   |       | 110     |
| PSI   |       | 1200    |

| HYD   | 0 | 11 E | ICC |    |
|-------|---|------|-----|----|
| 11114 | • | w    |     | ٠. |

| WOB | 35    |
|-----|-------|
| RPM | 40/50 |
| GPM | 359   |
|     |       |

| MUD LOG   |  |
|-----------|--|
| CEMENTING |  |

| 550 |
|-----|
|     |
|     |
| 540 |
|     |
|     |
| 500 |
|     |
| 500 |
|     |

#### BIT RECORD:

| Bit # | RR3    | 4      |
|-------|--------|--------|
| Ser#  | D83417 | K54263 |
| Size  | 7 7/8" | 7 7/8" |
| Make  | RTC    | RTC    |
| Туре  | HP53A  | HP53   |
| Jets  | 3/16s  | 3/16s  |
| in @  | 5202'  | 5584   |
| Out @ | 5584   |        |
| Feet  | 382    | 116    |
| Hrs   | 15 1/2 | 8      |
| Ft/Hr | 24.6   | 14.5   |
| CUM   |        |        |
| Grade |        |        |
|       |        |        |

#### **SURVEY DATA:**

| 3788  | 7 1/2 |
|-------|-------|
| 3881' | 7 1/4 |
| 3974  | 7 1/4 |
| 4064  | 71/2  |
| 4154  | 71/2  |
| 4244  | 7 1/4 |
| 4377  | 7     |
| 4532  | 6 1/4 |
| 4717  | 53/4  |
| 4936  | MR    |
| 4967  | 43/4  |
| 5202  | 43/4  |
| 5375  | 5     |
|       |       |

| TOTAL DAILY  | 10888  |
|--------------|--------|
| COST FORWARD | 163293 |
| CUM.TO DATE  | 174181 |

ADDL COMMENTS: BHA#2: Bit, JB, BS, 24-DC, XO=729.40

**CASING HEAD** 

WASATCH TOP: 3702 MESA VERDE TOP: 5610 SHOW: #27 5480'-5486' 227u #28 5495'-5500' 380u

#29 5506-5510 111u

## DAILY DRILLING REPORT

**LEASE: ROCK HOUSE** 

DATE: 7-13-98

**CURRENT DEPTH** PROPOSED TD

5700 5700

WELL: #25 RIG:

Chandler Rig #1

**ENGINEER** 

**FOOTAGE PAST 24 HRS** 

D.WIDNER CONSULTANT C.EMERSON

PRESENT OPERATION: Cementing Production Casing

800

| FROM | то   | ACTIVITY PAST 24 HRS:   |
|------|------|---|
| 0700 | 0830 | Circulate & Condition Hole f/ Casing  |
| 0830 | 1130 | Trip Out f/ Logs. DP Strap 5699'  |
| 1130 | 1630 | RU Schlumberger Run Platform Express Log Suite From Log TD 5698 to Surf. Tight pull @ 4200. RD Schlumb.                 |
| 1630 | 1900 | TIH to TD. No Fill.   |
| 1900 | 2000 | Circulate. RU T&M Casers.   |
| 2000 | 0200 | LDDP & DCs  |
| 0200 | 0530 | RU & Run Casing as Follows: 1-4 1/2" Float Shoe(.78'), 1-4 1/2" Shoe Jt(centralized mid-jt)(40.08'), 1-4 1/2" Float     |
|      |      | Collar(.61'), 56- Jts 4 1/2" 11.6# N-80 LT&C 8rd Casing(w/34 centralizers every other Jt to 2800')(2343.00'), 1- 4 1/2" |
|      |      | Stage Cementing Collar(2.08'), 79- Jts 4 1/2" 11.6# N-80 LT&C 8rd Csg(3300.27'), Set Above KB(-2.00').136 Jts Casing    |
|      |      | Set @ 5684.82'. Float Collar @ 5643.35', Stage Collar @ 3298.27'. Tag @ 5696'. RD T&M Casers.                           |
| 0530 | 0630 | Circulate Casing. RU Halliburton.   |
| 0630 | 0700 | Cement ing Stage #1   |
|      |      |   |
|      |      |   |
|      |      |   |

| MUD PRO | PERTIES: | _      |     |
|---------|----------|--------|-----|
| WT      | 9.6      | % OIL  | 0   |
| VIS     | 48       | %SAND  | TR  |
| WL      | 7.6      | %SOLID | 9.2 |
| GELS    | 8/17     | ALK    | .6  |
|         |          |        |     |

| Ca+  | 40     | i       |
|------|--------|---------|
| cake | 2/32   |         |
| рH   | 9.5    |         |
|      | DAILYM | UD COST |

| DAYWORK  |
|----------|
| LOCATION |
| MUD      |
| RIG MOVE |
| SURVEYOR |

CASING

SUPERVISION

**FOOTAGE** 

222

6450

PUMP DATA:

|       | 1     | 2       |
|-------|-------|---------|
| MAKE  | EMSCO | GarDenv |
| MODEL | D-500 | PZ-8    |
| LINER | 5 1/2 | 6 1/2   |
| SPM   |       |         |
| PSI   |       |         |

| HY | DRAULICS: |  |
|----|-----------|--|
|    |           |  |

| NOB   |  |
|-------|--|
| RPM . |  |
| 3PM   |  |
|       |  |

CUM. MUD COST

16422

| LOGGING   | 11452 |
|-----------|-------|
| MUD LOG   | 550   |
| CEMENTING |       |

**DAILY COSTS:** 

**FISHING** WATER WELLHEAD **CSG CREW RENTALS** 

300 7432 500

32927

500

#### BIT RECORD:

| Bit # | RR3    | 4      |
|-------|--------|--------|
| Ser#  | D83417 | K54263 |
| Size  | 7 7/8" | 7 7/8" |
| Make  | RTC    | RTC    |
| Туре  | HP53A  | HP53   |
| Jets  | 3/16s  | 3/16s  |
| in @  | 5202'  | 5584   |
| Out @ | 5584*  | 5700   |
| Feet  | 382"   | 116    |
| Hrs   | 15 1/2 | 8      |
| Ft/Hr | 24.6   | 14.5   |
| CUM   |        |        |
| Grade |        |        |
|       |        |        |

#### **SURVEY DATA:**

| 3788  | 71/2  |
|-------|-------|
| 3881' | 7 1/4 |
| 3974  | 7 1/4 |
| 4064  | 7 1/2 |
| 4154  | 71/2  |
| 4244  | 7 1/4 |
| 4377  | 7     |
| 4532  | 6 1/4 |
| 4717' | 53/4  |
| 4936  | MR    |
| 4967  | 43/4  |
| 5202" | 43/4  |
| 5375  | 5     |
|       |       |

| CASING HEAD  |        |
|--------------|--------|
| FLOAT EQUIPT | 3800   |
| TOTAL DAILY  | 64133  |
| COST FORWARD | 174181 |
| CUM.TO DATE  | 238314 |

#### **CASING DETAIL**

| 1-41/2" Float Shoe(ThdLokd)           | .78*    |
|---------------------------------------|---------|
| 1- 4 1/2" Shoe Jt(centralized mid-jt) | 40.08   |
| 1- 4 1/2" Float Collar(ThdLokd)       | .61*    |
| 56- 41/2" 11.6# N-80 LT&C 8rd Csg     | 2343.00 |
| w/34 centralizers                     |         |
| 1-4 1/2" Stage Cementing Collar       | 2.08    |
| 79- 4 1/2" 11.6# N-80 LT&C 8rd Csg    | 3300.27 |
| Above KB                              | -2.00   |
| 136 Joints Set 🛭                      | 5684.82 |

## DAILY DRILLING REPORT

LEASE: ROCK HOUSE

DATE: 7-14-98

5700

WELL: #25

Chandler Rig #1

**CURRENT DEPTH** PROPOSED TD 5700 FOOTAGE PAST 24 HRS

RIG: PRESENT OPERATION: Waiting On Completion

ENGINEER

**D.WIDNER** 

CONSULTANT **C.EMERSON FROM** TO **ACTIVITY PAST 24 HRS:** 0700 0730 Cement 1st Stage as follows: Pump 10 bbi H2O, 20bbi SuperFlush, 10 bbi H2O, 350sks Class\*G\* Cement w/ .3% CFR-3, !/4#/sk FloCele, .5% Halad-9, 2% Gel, 2% MicroBond, 2% SuperCBL. Displace w/ 89 bbl H2O. Reciprocate Casing During Cementing. Had Full Returns During Job. Ave Rate while mixing: 6.5bbl/min & Initial Density 13-14ppg due to Equip Malfunction. Switch to Manual Control to complete job. Bump Plug @ 2000psi Floats held OK. Drop Stage opening Tool & Open Stage Tool. Circulate 10 bbl H2O. Switch to Mud. 0730 1130 Circulate Waiting On Cement. 1130 1230 Cement 2nd Stage as follows: Pump 10bbl H2O, 400sks HOWCO-LITE w/ 1% Econolite, 1/4#/sk FloCele, 2% MicroBond & 3% Salt. Tail w/ 50 sks Class "G" Neat Cement. Drop Plug. Displace w/ 53.5bbl H2O. Bump Plug & Close Stage Tool @ 3000psi. Held OK. Good Returns During Job. Circulated 6 bbl Cement.RD Howco. 1230 1400 ND BOP Set Slips w/ 45K# On Hanger. Slips Set @ 1400 Hrs 7-13-98 1400 1600 Jet & Clean Pits. Rig Released 1800hrs 7-13-98

| MUD | PROPERTIES: |
|-----|-------------|
|     |             |
|     |             |

| NOU PAC | PERTIES | <u>i</u> |     |
|---------|---------|----------|-----|
| WT      | 9.6     | % OIL    | 0   |
| VIS     | 48      | %SAND    | TR  |
| WL      | 7.6     | %SOLID   | 9.2 |
| GELS    | 8/17    | ALK      | .6  |
| PV      | 25      | CI-      | 800 |
| YP      | 18      | ]        |     |

| Ca+  | 40   |
|------|------|
| cake | 2/32 |
| pН   | 9.5  |

| 9.5     |         |       |
|---------|---------|-------|
| DAILY M | UD COST |       |
| CUM. M  | UD COST | 16422 |

| DAIL | Y C | OS. | TS: |
|------|-----|-----|-----|
|      |     |     |     |

3225

16735

500

5684.82

| DAYWORK  |
|----------|
| LOCATION |
| MUD      |
| RIG MOVE |
| SURVEYOR |
| LOGGING  |

MUDIO

RENTALS

**FOOTAGE** 

|       |       | r       |
|-------|-------|---------|
|       | 1     | 2       |
| MAKE  | EMSCO | GarDenv |
| MODEL | D-500 | PZ-8    |
| LINER | 5 1/2 | 6 1/2   |
| SPM   |       |         |

| HYDRAULICS | : |
|------------|---|
|------------|---|

| WOB |  |
|-----|--|
| RPM |  |
| GPM |  |

| MODFOG    |  |
|-----------|--|
| CEMENTING |  |
| FISHING   |  |
| WATER     |  |

| FISHING  |     |
|----------|-----|
| WATER    |     |
| DC INSP  | 925 |
| CSG CREW |     |

#### BIT RECORD:

PSI

**PUMP DATA:** 

| SUR | VE | DA | TA |
|-----|----|----|----|
|     |    |    |    |

| CASING      |      |
|-------------|------|
| SUPERVISION | 500  |
| CASING HEAD | 1200 |

| Bit #   | RR3    | 4      |
|---------|--------|--------|
| Ser#    | D83417 | K54263 |
| Size    | 7 7/8* | 7 7/8" |
| Make    | RTC    | RTC    |
| Туре    | HP53A  | HP53   |
| Jets    | 3/16s  | 3/16s  |
| in 🙋    | 5202   | 5584   |
| Out @   | 5584   | 5700   |
| Feet    | 382    | 116    |
| Hrs     | 15 1/2 | 8      |
| Ft/Hr [ | 24.6   | 14.5   |
| CUM [   |        |        |
| Grade   |        |        |
|         |        |        |

| 3788  | 7 1/2 |
|-------|-------|
| 38811 | 7 1/4 |
| 3974  | 7 1/4 |
| 4064  | 7 1/2 |
| 4154  | 7 1/2 |
| 4244  | 7 1/4 |
| 4377  | 7     |
| 4532  | 6 1/4 |
| 4717  | 5 3/4 |
| 4936  | MR    |
| 4967  | 43/4  |
| 5202' | 43/4  |
| 5375  | 5     |
|       | 6     |

| TOTAL DAILY                          | 23085    |
|--------------------------------------|----------|
| COST FORWAR                          | D 238314 |
| CUM.TO DATE                          | 261399   |
| CASING DETAIL                        |          |
| 1-41/2" Float Shoe(ThdLokd)          | .78*     |
| 1- 41/2" Shoe Jt(centralized mid-jt) | 40.08'   |
| 1-41/2" Float Collar(ThdLokd)        | .61'     |
| 56- 41/2" 11.6# N-80 LT&C 8rd Csg    | 2343.00  |
| w/34 centralizers                    |          |
| 1-4 1/2" Stage Cementing Collar      | 2.08     |
| 79- 4 1/2" 11.6# N-80 LT&C 8rd Csg   | 3300.27  |
| Above KB                             | -2.00    |
|                                      |          |

136 Joints Set @

FORM 3160-5 (June 1990)

#### **WITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

| FORM APPROVED               |
|-----------------------------|
| Budget Bureau No. 1004-0135 |
|                             |

Expires: March 31, 1993

| SUNDRY NOTICES AND REPOR                                      | RTS ON WELLS                                     | UTU-0779   |
|---|--|--|
| Do not use this form for proposals to drill or to d           |  |  |
|   |  | 6. If Indian, Allottee or Tribe Name                     |
| Use "APPLICATION FOR PERM                                     | N/A  |  |
|   |  | 7. If Unit or CA, Agreement Designation                  |
| SUBMIT IN TRI   | PLICATE  | ROCK HOUSE UNIT  |
| 1. Type of Well   |  |  |
| UII Gas   |  | 8. Well Name and No.                                     |
| Well X Well Other   |  | ROCK HOUSE UNIT #25                                      |
|   |  | 9. API Well No.  |
| 2. Name of Operator   |  | 43-047-33031   |
| ROSEWOOD RESOURCES, INC.                                      |  | 10. Field and Pool, or Exploratory Area                  |
| 3. Address and Telephone No.                                  |  |  |
| P.O. Box 1668, Vernal, UT                                     | 435-789-0414                                     | 11. County or Parish, State                              |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey De  | • •  | 7  |
| 1663' FSL 1205' FEL, NE/SE Section 9, T115                    | S, R23E  | UINTAH CO., UTAH   |
| 12. CHECK APPROPRIATE BOX                                     |  |  |
| TYPE OF SUBMISSION  | ((es) TO INDICATE NATURE OF NOT                  |  |
| TIPE OF SUBMISSION  | TYP  | E OF ACTION  |
| Notice of Intent  | Abandonment                                      |  |
| Notice of litterit  | Recompletion                                     | Change of Plans  |
| X Subsequent Report   | Plugging Back                                    | New Construction   |
| oubodquent Noport   | Casing Repair                                    | Non-Routine Fracturing                                   |
| Final Abandonment Notice                                      | Altering Casing                                  | Water Shut-Off   |
| That i bands into it is to to                                 | X Other Put on prod                              | Conversion to Injection                                  |
|   | (Note: Report results of multiple c              | Dispose Water  |
|   | Completion or Recompletion Repo                  |  |
| 13. Describe Proposed or Completed Operations (Clearly s      | tate all pertinent details, and give pertinent o | lates, including estimated date of starting any proposed |
| work. If well is directionally drilled, give subsurface local | tions and measured and true vertical depths      | for all markers and zones pertinent to this work.)*      |
|   |  |  |
| Operator reports the above well was place                     | ed on production @ 11:00 a.m. o                  | n 10/16/98.  |
|   |  |  |
| Initial 24 hr. production: 1132 MCF/D; 3.34                   | 4 bbls. condensate; 3.34 bbls. w                 | ater.  |
| 16/64" choke.   | ſ  |  |
|   | Į.   | 1~)]EC]E][\V]E)^\  |
| Future production will be reported on the i                   | MMS-3160 monthly report.                         |  |
|   | 1  | [\\ ] OCT 23 1998       //                               |
|   | 1  |  |
|   |  |  |
| COPIES: ORIG. & 2-BLM; DIV. OG&M J MCQUILLEN                  |  | DIV. OF OIL, GAS & MINING                                |
| 14. I hereby certify that the foregoing is true and           | correct  |  |
| Signed Luc Nemer  | Title Administrative Assist                      | ant Date10/19/98   |
| (This space for Federal or State office use)                  |  |  |
| Approved by   | Title  | Date   |
| Conditions of approval, if any:                               |  |  |

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States andy faise, fictitious or fraudulent statements or representations as to any mater within its jurisdiction.

FORM 3†60-5 (June 1990)

# MITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-013

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

UTU-0779

| SUNDRY NOTICES AND | <b>REPORTS ON WELLS</b> |
|--------------------|-------------------------|
|--------------------|-------------------------|

Do not use this form for proposals to drill or to deepen or reenter a different reservoir.

Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

| N/A |  |  |
|-----|--|--|
|     |  |  |

7. If Unit or CA, Agreement Designation

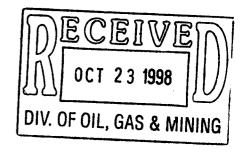
6. If Indian, Allottee or Tribe Name

**ROCK HOUSE UNIT** 

| I. Type of Well   |   |  |  |  |  |
|---|---|--|--|--|--|
| Well X Well Other   |   | 8. Well Name and No.  ROCK HOUSE UNIT #25  9. API Well No.   |  |  |  |
| 2. Name of Operator   |   | 43-047-33031   |  |  |  |
| ROSEWOOD RESOURCES, INC.  |   | 10. Field and Pool, or Exploratory Area  |  |  |  |
| 3. Address and Telephone No.  |   |  |  |  |  |
| P.O. Box 1668, Vernal, UT   | 435-789-0414  | 11. County or Parish, State  |  |  |  |
| Location of Well (Footage, Sec., T., R., M., or Survey Description) 1663' FSL 1205' FEL, NE/SE Section 9, T11S, R23E                    |   | UINTAH CO., UTAH   |  |  |  |
| 2. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  |   |  |  |  |  |
| TYPE OF SUBMISSION TYPE OF ACTION   |   |  |  |  |  |
| Notice of Intent  X Subsequent Report  Final Abandonment Notice   | Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other WEEKLY (Note: Report results of multiple of Completion or Recompletion Rep | ort and Log form.)   |  |  |  |
| <ol><li>Describe Proposed or Completed Operations (Clearly s<br/>work. If well is directionally drilled, give subsurface loca</li></ol> | tate all pertinent details, and give pertinent tions and measured and true vertical depth:  | dates, including estimated date of starting any proposed s for all markers and zones pertinent to this work )* |  |  |  |

Weekly Status - completion from 9/26 -10/16/98

Current Status - Completing



| COPIES: ORIG. & 2-BLM; DIV. OG&M J MCQUILLEN                | N                              |               |  |  |
|---|--------------------------------|---------------|--|--|
| 14. I hereby certify that the foregoing is true and correct |                                |               |  |  |
| Signed Lug Nome   | Title Administrative Assistant | Date 10/19/98 |  |  |
| (This space for Federal or State office use)                |                                |               |  |  |
| Approved by   | Title                          | Date          |  |  |
| Conditions of approval, if any:                             |                                |               |  |  |

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States andy false, fictitious or fraudulent statements or representations as to any mater within its jurisdiction.

#### RH# 25

ROSEWOOD RESOURCES, INC.

**Daily Completion Report** 

**WELL NAME: ROCKHOUSE 25** 

DATE: 10/19/98

DEPTH:

5700

PBTD PERFS: 5644

5322' - 26'

5278' - 88'

Lease #: UTU-0780 Location: NE/SE SEC9,T11S,R23E

County: Uintah Co., Utah

4764' - 74'

PACKER:

RBP:

CIBP:

EOT:

5297'

Engineer

D. Widner

Consultant

T. THURSTON

#### 9/26/98

MIRU POOL WELLSERVICE RIG #824. MOVE ALL EQUIPMENT, SPOT TANKS, SET UP PIPE RACKS, UNLOAD 2 3/8" TBG ON RACKS AND NU BOP"S.

Daily cost \$18,738 cum. cost \$280,137

#### 9/29/98

PU AND RAN IN HOLE WITH 3 7/8" ROCK BIT, 4 1/2" CSG SCRAPER, 4-3 1/8" DC ON 2 3/8" TBG TO 3220'. TESTED CSG TO 2500#, HELD OK. DRILLED CMT FROM 3220' TO 3300', DRILLED OUT STAGE COLLAR @ 3300'. TESTED TO 2500#, HELD OK. RIH W/ DRLG ASSEMBLY, TAGGED TD @ 5634'. REVERSED HOLE CLEAN W/ 80 BBLS 3% KCL, POOH, LAYED DOWN DRLG ASSEMBLY. SDFN

Daily cost

\$4,531 cum. cost \$284,668

#### 9/30/98

RU SHLUMBERGER, RAN CEMENT BOND LOG W/ VARIABLE DENSITY. MAX RUN DEPTH 5639', GOOD CEMENT ACROSS ALL ZONES OF INTEREST, TOP OF GOOD CEMENT 3788', TOP OF CEMENT SURFACE. PERFORATED INTERVAL 5322' TO 5326', 4'-4 SPF, 16 HOLES W/ 3 1/2" HSD-UDP. NO SHOW AFTER PERFORATING. PU AND RIH W/ NOTCH COLLAR, XN NIPPLE, 4' SUB, ARROW SET-1 PKR, ON AND OFF TOOL, 1 JT. TBG, X NIPPLE AND 169 JTS 2 3/8" TBG AND 10' SUB. SET PKR IN COMPRESSION, LANDED IN WELLHEAD ON HANGER. XN NIPPLE @ 5314', PKR @ 5302', AND XN NIPPLE @ 5268'. RU SWAB, MADE 3 SWAB RUNS, WELL KICKED OFF UNLOADED TBG. FLOWED WELL 2 HRS ON 12/64" CHOKE, FTP STABLE @ 420#, EST. MCF 320. FLOWING DRY GAS, NO FLUID. SION

Daily cost \$22,103 cum. cost \$306,771

#### 10/1/98

SITP 1650#, OPENED UP ON 16/64" CHOKE FOR 4 HRS, FTP STABLE @ 260#, EST. MCF 355. RECOVERED NO FLUID. LOADED TBG W/ 20 BBLS 3% KCL, BROKE DOWN PERFS WITH RIG PUMP @ 1700#, EST. RATE OF 3 BPM @ 1700# ISIP 500# ( FRAC GRAD 54) 1 MIN PSI 0# PUMPED TOTAL OF 23 BBLS KCL RU SWAB MADE 2 RUNS

#### RH# 25

@ 1700#, ISIP 500# (FRAC GRAD. .54) 1 MIN. PSI 0#. PUMPED TOTAL OF 23 BBLS KCL. RU SWAB, MADE 2 RUNS WELL KICKED OFF, RECOVERED 20 BBLS LOAD WATER. PUT WELL TO TANK ON 16/64" CHOKE FOR 4 HRS, FTP BUILT TO 280#, NO FLUID. PUT 30/64" CHOKE IN FOR 1 HR, FTP 90#, WELL UNLOADED 6. 76 BBLS WATER. RECOVERED TOTAL OF 27 BBLS WATER. SION

Daily cost \$2,846

\$2,846 cum. cost \$309,617

10/2/98

SITP 1620#, OPENED TO TANK ON 20/64" CHOKE FOR 4 1/2 HRS, STABLE FTP 210#, EST MCF 451, NO FLUID. PUT 24/64' CHOKE IN FOR 3 HRS, FTP 145#, RECOVERED NO FLUID, EST. MCF 451. IN 30/64" CHOKE FOR 1 HR, FTP 95#, EST MCF 464, RECOVRED NO FLUID. SION

Daily cost

\$2,388 cum. cost \$312,005

#### 10/4/98

SITP 1650# RU SLICKLINE, SET XN PLUG IN XN NIPPLE @ 5313', BLEW DOWN TBG, GOT OFF, ON AND OFF TOOL, LOADED HOLE W/ 3% KCL, TESTED PKR AND PLUG TO 2500#, HELD OK. POOH W/ TBG, RU SCHLUMBERGER, PERFORATED INTERVAL, 5278' TO 5288', 10'- 4 SPF, 40 HOLES W/ 3 1/2" HSD-UDP CSG. GUN. NO SHOW AFTER PERFORATING, RIH W/ NOTCH COLLAR, XN NIPPLE, 8' SUB, ARROW SET-1X PKR, 1 JT. TBG, X NIPPLE AND 166 JTS TBG. XN NIPPLE @ 5213', PKR @ 5197' AND X NIPPLE @ 5162'. SET PKR IN COMPRESSION, LANDED IN WELL HEAD ON HANGER. TESTED PKR TO 2500#, HELD OK. RU SWAB, MADE 2 RUNS, WELL KICKED OFF UNLOADED TBG. PUT TO TANK ON 12/64" CHOKE FOR 2 1/2 HRS, STABLE FTP 360#, NO FLUID, EST. MCF 274. SION.

Daily cost \$11,074 cum. cost \$323,079

10/5/98

SITP 1940#, OPEN TO TANK ON 18/64" CHOKE FOR 1 1/2 HR, FTP 150#, NO FLUID, 260 MCF. IN 14/64" CHOKE FOR 1 HR, FTP 255#, NO FLUID, 255 MCF. LOADED TBG W/ 20 BBLS 3% KCL, BROKE DOWN PERFS ON 5 BBLS KCL @ 2000#, EST. RATE OF 3 BPM @ 1850#, ISIP 1000# (FRAC GRAD. .63) 1 MIN. 0#. RU SWAB, MADE 3 RUNS, KICKED WELL OFF, UNLOADED HOLE, RECOVERED 25 BBLS LOAD WATER. PUT TO TANK ON 14/64" CHOKE FOR 3 HRS, FTP 275#, RECOVERED NO FLUID, EST. MCF 286. SHUT IN TILL MON.

Daily cost \$2,326

\$2,326 cum. cost \$325,405

#### 10/6/98

SITP 1940#, OPEN TO TANK ON 18/64" FOR 2 HRS, FTP 140#, NO FLUID, EST. MCF 243. RU HALLIBURTON, FRACED INTERVAL 5278' TO 5288' W/ 9943 GALS 20# DELTA WITH 20,200# 20/40 OTTAWA. AVG. PSI 3850#, AVG. RATE 7.9 BPM, MAX PSI 4226#, ISIP 2533#, 5 MIN. 2213#, 10 MIN. 2129# AND 15 MIN. 2070#. SHUT IN FOR 2 HRS, SITP 1575#, TOTAL FLUID TO RECOVER 237 BBLS, OPENED UP ON 18/64" CHOKE FOR 2 1/2 HRS, RECOVERED 65 BBLS LOAD WATER, WELL BLEW DOWN, RU SWAB MADE 2 RUNS, KICKED WELL OFF, PUT TO TANK ON 20/64" CHOKE FOR 7 HRS, FTP 770#, IN 18/64" FOR 8 HRS, FTP 830#, RECOVERED TOTAL OF 149 BBLS LOAD WATER, 88 BBLS LEFT TO RECOVER. WELL FLOWING W/ A LIGHT MIST W/ SLUGS OF LOAD WATER.

Daily cost \$22,205 cum. cost \$347,610

10/7/98

THIS A.M. FTP 830# ON 18/64" CHOKE, WELL FLOWING W/ A GOOD SHOW OF GAS W/ A CONTINOUS MIST AND SLUGS OF LOAD WATER. IN 20/64" CHOKE FOR 3 HRS, FTP 660#, RECOVERED 4 BBLS LOAD WATER. PUT 18/64" CHOKE BACK IN FOR 4 HRS, MADE 4 BBLS LOAD WATER IN THE FIRST 3 HRS, LAST HOUR NO FLUID. FTP STABLE AT 760#, EST. MCF 1318. TOTAL LOAD RECOVERED 157 BLS, 80 BBLS LTR. SION

Daily cost \$2,258 cum. cost \$349,868

#### 10/8/98

THIS A.M., SITP 1500#. RU SLICKLINE, SET XN PLUG IN XN NIPPLE @ 5213'. BLEW DOWN TBG, GOT OFF, ON AND OFF TOOL, LOADED HOLE W/ 3% KCL, TESTED PKR, AND PLUG TO 2500#, HELD OK. POOH W/ TBG. RU SCHLUMBERGER, PERFORATED INTERVAL 4764' TO 4774', 10', 4 SPF, 40 HOLES W/ 3 1/2" HSD-UDP CSG GUN. NO SHOW AFTER PERFORATING. PU, RIH W/ XN NIPPLE, 8' SUB, ARROW SET 1X PKR, 1 JT TBG, X NIPPLE AND 149 JTS 2 3/8" TBG. LANDED XN NIPPLE @ 4684', PKR @ 4669' AND X NIPPLE @ 4636'. SET PKR IN COMPRESSION, LANDED ON HANGER IN WELL HEAD. WHEN SET PKR, WELL KICKED OFF, UNLOADED HOLE, PUT TO TANK ON 16/64" CHOKE FOR 3 HRS, FTP STABLE FOR 2 HRS W/ NO FLUID @ 800#, EST. MCF 1092. SION

Daily cost \$10,249 cum. cost \$360,117

#### 10/9/98

THIS A.M., SITP 1650#, OPENED TO TANK ON 18/64" CHOKE FOR 5 HRS, 1N THE FIRST 3 HRS, RECOVERED 9 BBLS WATER, LAST 2 HRS, RECOVERED NO FLUID, FTP 700#, EST. MCF 1214. IN 20/54" CHOKE FOR 3 HRS, FTP PULLED TO 450#, NO FLUID, EST. MCF 966. PUT 18/64" CHOKE BACK IN FOR 2 HRS, FTP 550#, NO FLUID, EST. MCF 954. SION

Daily cost \$2,801 cum. cost \$362,918

#### 10/10/98

THIS A.M., SITP 1700#, OPEN TO TANK ON 18/64" CHOKE FOR 2 HRS AND 45 MIN., FTP 700#, EST. MCF 1214, RECOVERED NO FLUID. RU HALLIBURTON, FRACED INTERVAL 4764' TO 4774' W/ 7922 GALS 20# DELTA W/ 15,100# 20/40 OTTAWA SAND. BROKE DOWN PERS @ 3800#, AVG. PSI 3120#, AVG. RATE 9.0 BPM, MAX PSI 3330#. ISIP 1314#, 5 MIN 1075#, 10 MIN 799# AND 15 MIN 633#. SHUT IN FOR 2 HRS, SITP 200#. OPENDED TO TANK ON 24/64" CHOKE FOR 3 HRS, FTP 775#, RECOVERED 9 BLW. IN 20/64" CHOKE FOR 3 HRS, FTP 800#, WELL FLOWING W/ A GOOD SHOW OF GAS W/ A TRACE OF LOAD WATER, RECOVERED NO WATER. TOTAL WATER RECOVERED 9 BBLS, TOTAL TO RECOVER 189 BBLS, 180 BBLS LTR. SION

Daily cost \$19,665 cum. cost \$382,583

#### 10/12/98

THIS A.M., SITP 1050#, OPEN TO TANK ON 20/64" CHOKE FOR 4 1/2 HRS. IN 1 1/2 HRS, FTP STABLE @ 925#,

#### RH# 25

THIS A.M., SITP 1050#, OPEN TO TANK ON 20/64" CHOKE FOR 4 1/2 HRS. IN 1 1/2 HRS, FTP STABLE @ 925#, RECOVERED NO FLUID, EST. MCF 1986. IN 22/64" CHOKE FOR 2 1/2 HRS, FTP 850#, RECOVERED NO FLUID, EST. MCF 2215. PUT 24/64" CHOKE IN FOR 1 HR, FTP PULLED TO 650#, NO FLUID, EST. MCF 2020. RECOVERED NO LOAD WATER, TOTAL LOAD WATER RECOVERED 9 BBLS. 180 BBLS LTR.

Daily cost

\$2,671 cum. cost \$385,254

#### 10/13/98

THIS A.M., SITP 1050#, RU SLICKLINE, SET XN PLUG IN XN NIPPLE @ 4684\*. BLEW DOWN TBG, RU CUDD SNUBBING UNIT. UNSET ARROW SET 1X PKR, STRIPPED AND SNUBBED OUT OF HOLE. LAYED DOWN PKR, SNUBBED AND STRIPPED BACK IN HOLE W/ RETRIVING HEAD, TAGGED SAND @ 5195\*, COULD NOT GET ON, ON AND OFF TOOL. RU CUDD NITROGEN TRUCK, WASHED 2' OF SAND OFF PKR @ 5197\*, CIRCULATED HOLE CLEAN, UNSET PKR. STRIPPED AND SNUBBED OUT OF HOLE WITH PKR, LAYED DOWN PKR, SION.

Daily cost \$14,444 cum. cost \$399,698

#### 10/14/98

THIS A.M., SITP 1090#, SNUBBED AND STRIPPED IN HOLE W/ RETRIVING HEAD, TAGGED SAND @ 5288'. RU CUDD NITROGEN TRUCK, WASHED AND CIRCULATED 14' OF SAND TO PKR @ 5302'. CIRCULATED HOLE CLEAN, LATCHED ON TO AND UNSET PKR, STRIPPED AND SNUBBED OUT OF HOLE. PU, RIH W/ NOTCH COLLAR, GLASS DISC SUB, 4' SUB, XN NIPPLE, 1 JT. TBG, X NIPPLE, AND 173 JTS TBG TO 5400', TAGGED NO FILL. PULLED 4 JTS, LANDED TBG ON 170 JTS @ 5297', LANDED ON HANGER IN WELL HEAD. RIGGED DOWN CUDD SNUBBING UNIT, REMOVED BOP'S, NIPPLED UP WELL HEAD. HOOKED UP FLOW LINE, DROPPED BAR, RUPTURED GLASS DISK, WELL READY TO PUT ON LINE. PERFS OPEN TO WELL BORE, 4764' TO 4774', 5278' TO 5288' AND 5322' TO 5326'.

Daily cost \$17,009 cum. cost \$416,707

#### 10/15/98

THIS A.M., SITP 1250#, RD POOL RIG #824, RACK OUT ALL EQUIPMENT, MOVE TO HANGING ROCK #3-11. PERFS; 4764' TO 4774', 5278' TO 5288', AND 5322' TO 5326'. WELL PUT ON LINE.

Daily cost

\$2,520 cum. cost \$419,227

#### 10/16/98

WELL PUT ON LINE @ 11:00 A.M. 10/14/98. SITP1200#, SICP1200#. 10/15/98 FTP 800# SICP 930#, PUT ON LINE ON 16/64" CHOKE, MADE 1031 MCF IN 21 HRS, 1.67 BBLS CONDENSATE AND 8.35 BBLS WATER.

Daily cost

\$2,520 cum. cosi \$419,227

#### 10/17/98

10/16/98 FTP 760# SICP 810#, ON 16/64" CHOKE FOR 24 HRS, MADE 1132 MCF, 3.34 BBLS CONDENSATE AND 3.34 BBLS WATER.

10/17/98 FTP 720# SICP 790#, ON 16/64" CHOKE FOR 24 HRS, MADE 1098 MCF, 1.67 BBLS CONDENSATE AND 3.34 BBLS WATER.

#### RH# 25

3.34 BBLS WATER.
10/18/98 FTP 700# SICP 760#, ON 16/64" CHOKE FOR 24 HRS, MADE 1056 MCF, 1.67 BBLS CONDENSATE AND 3.34 BBLS WATER.

FORM 3160-5 (June 1990)

## **UNITED STATES DEPARTMENT OF THE INTERIOR**

**BUREAU OF LAND MANAGEMENT** 

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

OCT 23 1998

DIV. OF OIL, GAS & MINING

5. Lease Designation and Serial No.

| SUNDRY NOTICES AND REPOR   | UTU-0779  |   |  |
|--|---|---|--|
| Do not use this form for proposals to drill or to de   | 6. If Indian, Allottee or Tribe Name                                    |   |  |
| Use "APPLICATION FOR PERMI   | N/A   |   |  |
|  |   | 7. If Unit or CA, Agreement Designation                 |  |
| SUBMIT IN TRIE   | PLICATE   | ROCK HOUSE UNIT   |  |
| 1. Type of Well  |   | C. Well Name and No.                                    |  |
| UII Gas  |   | 8. Well Name and No.                                    |  |
| Well X Well Other  |   | ROCK HOUSE UNIT #25                                     |  |
|  |   | 9. API Well No.   |  |
| 2. Name of Operator  |   | 43-047-33031  |  |
| ROSEWOOD RESOURCES, INC.   |   | 10. Field and Pool, or Exploratory Area                 |  |
| 3. Address and Telephone No. P.O. Box 1668, Vernal, UT   | 435-789-0414  | 11. County or Parish, State                             |  |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey De   |   | The County of Parish, State                             |  |
| 1663' FSL 1205' FEL, NE/SE Section 9, T11S   | UINTAH CO., UTAH  |   |  |
| 12. CHECK APPROPRIATE BOX  | (es) TO INDICATE NATURE OF NOTIC  | CE, REPORT, OR OTHER DATA                               |  |
| TYPE OF SUBMISSION TYPE OF ACTION  |   |   |  |
|  |   |   |  |
| X Notice of Intent   | Abandonment   | Change of Plans   |  |
|  | Recompletion  | New Construction  |  |
| Subsequent Report  | Plugging Back   | Non-Routine Fracturing                                  |  |
|  | Casing Repair   | Water Shut-Off  |  |
| Final Abandonment Notice   | Altering Casing   | Conversion to Injection                                 |  |
|  | Other   | X Dispose Water   |  |
|  | (Note: Report results of multiple co<br>Completion or Recompletion Repo |   |  |
| 13. Describe Proposed or Completed Operations (Clearly s work. If well is directionally drilled, give subsurface local | tate all pertinent details, and give pertinent d                        | ates, including estimated date of starting any proposed |  |
| Produced water will be tanked on location located in Section 12, T5S, R19E, Uintah                                     | -   | •   |  |
| form.  | •   |   |  |
|  |   | MECEIVEM  |  |

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| 14. I hereby   | certify that the fo | oregoing is true and correct |                                |        |          |
|----------------|---------------------|------------------------------|--------------------------------|--------|----------|
| Signed         | Luc                 | Neme                         | Title Administrative Assistant | Date_  | 10/19/98 |
| (This space fo | or Federal or State | office use)                  |                                |        |          |
| Approved by    |                     |                              | Title                          | Date _ |          |
| Conditions of  | approval, if any:   |                              |                                |        |          |

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States andy false, fictitious or fraudulent statements or representations as to any mater within its jurisdiction.

**FORM 3160-5** (June 1990)

## **DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT**

| FORM APPROVED               |
|-----------------------------|
| Budget Bureau No. 1004-0135 |
|                             |

Expires: March 31, 1993

|   |                                      | 5. Lease Designation and Serial No.  |
|---|--------------------------------------|--|
| SUNDRY NOTICES AND REPORTS (  | UTU-0779                             |  |
| Do not use this form for proposals to drill or to deepe   | 6. If Indian, Allottee or Tribe Name |  |
| Use "APPLICATION FOR PERMIT -" f  | or such proposals                    | N/A  |
|   |                                      | 7. If Unit or CA, Agreement Designation  |
| SUBMIT IN TRIPLI  | CATE                                 | ROCK HOUSE UNIT  |
| 1. Type of Well   |                                      | 8. Well Name and No.   |
| Well X Well Other   |                                      | ROCK HOUSE UNIT #25  |
|   |                                      | 9. API Well No.  |
| 2. Name of Operator   |                                      | 43-047-33031   |
| ROSEWOOD RESOURCES, INC.  |                                      | 10. Field and Pool, or Exploratory Area  |
| <ol> <li>Address and Telephone No.</li> <li>P.O. Box 1668, Vernal, UT</li> <li>435</li> </ol>   | -789-0414                            | 11. County or Parish, State  |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Descrip   | tion)                                | ,  |
| 1663' FSL 1205' FEL, NE/SE Section 9, T11S, R2  | 3E                                   | UINTAH CO., UTAH   |
| 12. CHECK APPROPRIATE BOX(es)   | TO INDICATE NATURE OF NOTICE         | E, REPORT, OR OTHER DATA   |
| TYPE OF SUBMISSION  | TYPE                                 | OF ACTION  |
| Subsequent Report Final Abandonment Notice  13. Describe Proposed or Completed Operations (Clearly state a work. If well is directionally drilled, give subsurface locations  Produced water will be tanked on location and located in Section 12, T5S, R19E, Uintah Couform. | and r                                | Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection  ALAND GAS  ate of starting any proposed pertinent to this work.)*  Disposal Facility athly MMS-3160  ALAND GAS  ALAND GAS  ALE OF STARTING AND PROPOSED PROPOSE |
| COPIES: ORIG. & 2-BLM; DIV. OG&M J MCQUI  |                                      | , GAS & MINING   |
|   | Title Administrative Assista         | ant Date 10/19/98  |
| Signed Juy Venu   | THE AUTHINISH SUVE ASSIST            | Jaic 10/10/00  |
| (This space for Federal or state office use)  | Title                                | Date   |
| Approved by  Conditions of approval, if any:  | Title                                | Date   |
| Conditions of approval, it ally.  |                                      |  |

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statements or representations as to any mater within its jurisdiction.

# STATE OF UTAH DIVISION OF OIL, GAS AND MINING DRILLING INSPECTION FORM

| OPERATOR: ROSEWOOD RESOURCES INC. COMPANY REP: CHUCK EMERSON  |
|---|
|   |
| WELL NAME ROCKHOUSE #25 API NO 43-047-33031   |
| QTR/QTR: NE/SE SECTION: 9 TWP: 11S RANGE: 23E   |
| CONTRACTOR: CHANDLER DRILLING CO. RIG NUMBER: 1   |
| INSPECTOR: DAVID HACKFORD TIME: 1:00 PM DATE: 7/9/98  |
| SPUD DATE: DRY: 6/20/98 ROTARY: 7/6/98 PROJECTED T.D.5700'  |
|   |
| OPERATIONS AT TIME OF VISIT: DRILLING 7 7/8" HOLE.  |
| WELL SIGN: Y MUD WEIGHT 9.2 LBS/GAL BOPE: Y   |
|   |
| BLOOIE LINE: N FLARE PIT: Y H2S POTENTIAL: Y  |
|   |
| ENVIRONMENTAL:  |
| RESERVE PIT: Y FENCED: Y LINED: Y PLASTIC: Y  |
| RUBBER: N BENTONITE: N SANITATION: Y  |
| BOPE TEST RECORDED IN THE RIG DAILY TOUR BOOK: Y  |
| REMARKS:  |
| SURVEY AT 4377' WAS 7 DEGREES. NIPPLED UP WITH DOUBLE GATE, ANNULAR AN ROTATING HEAD NIPPLED UP ON 537' OF 9 5/8" SURFACE PIPE. REMOTE CLOSING UNIT ON FLOOR AND FUNCTIONAL. WELL DRILLED WITH LOW SOLIDS NON-DISPERSED DRILLING MUD, VIS 37, |

## **UNITED STATES** DEPARTMENT OF THE INTERIOR

SUBMIT IN ✓LICATE\* FORM APPROVED

(See other in- | OMB NO. 1004-0137

| structions on | Expires: | February 28, 1995 |  |
|---------------|----------|-------------------|--|
|               |          |                   |  |

LEASE DESIGNATION AND SERIAL NO. **BUREAU OF LAND MANAGEMENT** UTU-63030C IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG\* N/A 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DB7 Other **ROCK HOUSE UNIT** 1b. TYPE OF WELL 8. FARM OR LEASE NAME, WELL NO. WELL X OVER RESVR Other **ROCK HOUSE UNIT #25** 2. NAME OF OPERATOR ROSEWOOD RESOURCES, INC. 43-047-33031 3. ADDRESS AND TELEPHONE NO. 10. FIELD AND POOL OR WILDCAT P. O. BOX 1668, VERNAL, UT 84078 435-789-0414 4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.\* 11. SEC., T., R., M., OR BLOCK AND SURVEY At Surface OR AREA 1663' FSL 1205' FEL NE/SE At top prod. Interval reported below SEC. 9, T11S, R23E SLB & M At total depth 14. PERMIT NO. DATE ISSUED 12. COUNTY OR PARISH 13. STATE 12/5/97 UINTAH UTAH 15. DATE SPUDDED 17. DATE COMPL. (Ready to prod.) 16. DATE T.D. REACHED 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 19. ELEV. CASINGHEAD 6/19/98 7/12/98 10/14/98 6098' GR 6113'KB 20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL. 3. INTERVALS **ROTARY TOOLS** CABLE TOOLS HOW MANY\* DRILLED BY 5644 530'-5700' NA 24. PRODUCING INTERVAL(S), OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE WASATCH 4764' - 5366' NO 26. TYPE ELECTRIC AND OTHER LOGS BUN 27. WAS WELL CORED MUG LOG, CNLD/GR, AI/LC/GR, CBL/GR, ML/GR 7-16-98 NO 23. CASING RECORD (Report all strings set in well) CASING SIZE/GRADE WEIGHT, LB./FT. HOLE SIZE TOP OF CEMENT, CEMENTING RECORD AMOUNT PULLED 9-5/8" J-55 36# 522' GL 12 1/4" SURF - 300 SX PREMIUM+ ADD 4-1/2" N-80 11.6# 5685 7 7/8" Stg 1 - 350 SX "G" Stg 2 - 400 SX HOWCO LITE Stage Collar @ 3300 TAIL W/50 SX "G" NEAT LINER RECORD TUBING RECORD SIZE TOP (MD) BOTTOM (MD) SACKS CEMENT\* SCREEN (MD) DEPTH SET (MD) SIZE PACKER SET (MD) 2 3/8" 5297 NONE 31. PERFORATION RECORD (Interval, size and number) ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. INTERVAL SIZE NUMBER DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 5322' - 26" 5278' - 88 0.46 16 Frac w/9943' gals fluid, 20,200# 20/40 sc 5278' - 88' 0.46 40 4764' - 74' Frac w/7922' gals fluid, 15,100 # 20/40 s 4764' - 74' 0.46 40 PRODUCTION DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) WELL STATUS (Producing or shut-in) 10/14/98 Flowing Producing DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL-BBLS. GAS-MCF. WATER-BBL. GAS-OIL RATIO 10/16/98 24 16/64" 3.34 1132 3.34 FLOW. TUBING PRESS. CASING PRESSURE CALCULATED OIL-BBL GAS-MCF WATER-BBL. OIL GRAVITY-API (CORR.) 24-HOUR KATE 760# 810# 3 1132 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY Sales/fuel **Ivan Sadlier** 35. LIST OF ATTACHMENTS 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records **ADMINISTRATIVE ASSISTANT** SIGNED TITLE 12/11/98 DATE (See Instructions and Spaces for Additional Data on Reverse Side)

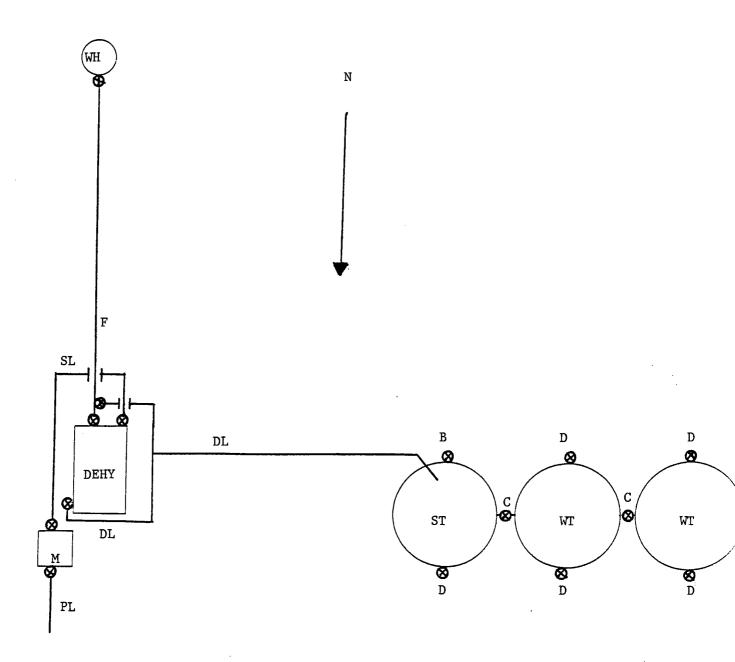
| TOP  | BOTTOM    | recoveries);                     |                       |                |                     |
|--|-----------|----------------------------------|-----------------------|----------------|---------------------|
|  |           | DESCRIPTION, CONTENTS, ETC.      |                       | T              | TOP                 |
|  |           |                                  | NAME                  | MEAS. DEPTH    | TRUE<br>VERT. DEPTH |
|  |           |                                  | WASATCH<br>MESA VERDE | 3702'<br>5610' | ·                   |
|  |           |                                  |                       |                |                     |
|  |           |                                  |                       |                |                     |
|  | •         |                                  |                       |                |                     |
|  |           |                                  |                       |                |                     |
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|  |           |                                  |                       |                |                     |
|  |           |                                  |                       |                |                     |
|  |           |                                  |                       |                |                     |
| COPIES: BLM - VERNAL/ORIG. & 2 COPIES; DIV. OG&M | . & 2 COF | PIES; DIV. OG&M - DALLAS 1 COPY; |                       |                |                     |
|  |           |                                  |                       |                |                     |

## ROSEWOOD RESOURCES, INC. VERNAL, UTAH

43.47.33031

ROCK HOUSE UNIT FEDERAL #25
ROCK HOUSE UNIT
AGREEMENT # UTU 63030C
NE/SE SEC. 9 T11S R23E
UINTAH COUNTY, UT

Site Security Plan is located in the Vernal, Utah office.



 $\mathbf{M}$ 

### **LEGEND**

F FLOWLINE

DL DUMP/BLOWDOWN LINE

CL CONDENSATE LINE

SL SALES LINE

PL WILDHORSE PIPELINE

WH WELLHEAD

SEP SEPARATER

ST STORAGE TANK

WT WATER TANK

**⊗** VALVE

A SEALED CL VALVE

B ⊗ SEALED SALES VALVE

D ⊗ SEALED DRAIN VALVE

M GAS METER

PU PUMPING UNIT

**DEHY** GAS DEHYDRATER

COMP GAS COMPRESSOR

C & EQUALIZER LINE

### ATTACHMENT TO PRECEDING SITE FACILITY DIAGRAMS

General sealing of valves - sales are by tank gauging.

<u>Production Phase</u>: All drain valves (D) and sales valves (B) are sealed closed. The fill valve (A) and equalizer valve (C) are open and unsealed on the producing tank. The equalizer valve (C) on another tank is open and unsealed to allow production to flow to a spare tank in the event of an upset.

Sales Phase: The tank from which sales are being made will be isolated by sealing close the fill line (A), equalizer line (C), and drain valve (D) prior to shipping. After these valves are sealed closed, the top gauge will be taken. The sales valve (B) on the isolated sales tank will be broken and opened for sales. After sales, the sales valve (B) is sealed closed and the closing gauge is taken. The fill valve (A) and equalizer valve (C) seals are broken and the valves opened, when production is turned back into this tank.

<u>Draining Phase</u>: The tank being drained will be isolated by sealing closed the sales valve (B) and the other drain valves (D) on the other tanks. The top gauge will be taken prior to opening the drain valve (D). The water is drained off and the drain valve (D) is sealed closed and the top gauge is retaken.

| Sealed Valves     | Producing | Shipping | Draining |
|-------------------|-----------|----------|----------|
| A-Fill Valve      | open      | closed   | open     |
| B-Shipping Valve  | closed    | open     | closed   |
| C-Equalizer Valve | open      | closed   | open     |
| D-Drain Valve     | closed    | closed   | open     |
| E-Hot-oil Valve   | closed    | closed   | closed   |